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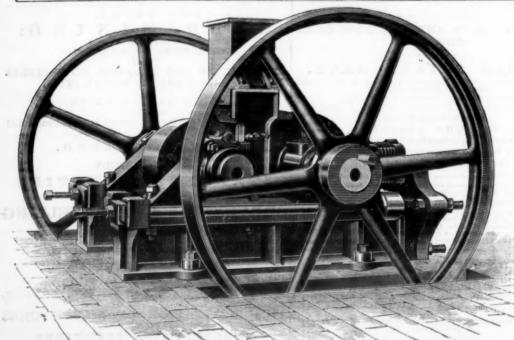
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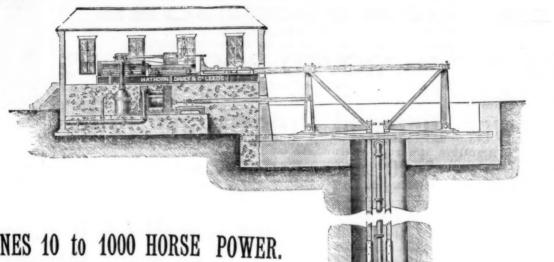
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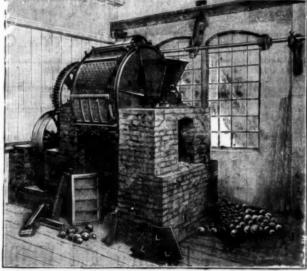
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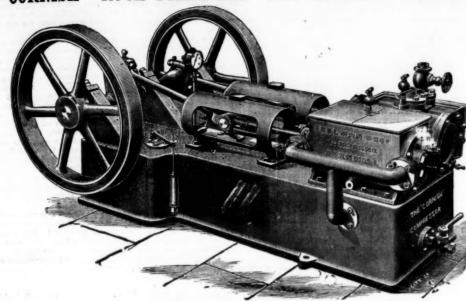
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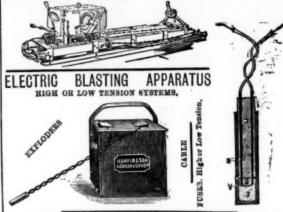
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OUTPUT 1 TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE. CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS

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The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carndochan Mine, near Bala, North Wales, will, by arrangement, show their CLARKSON-STANFIELD plant working on a Refractory Low Grade Gold Ore.

NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Hailway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Fatent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

William Treverrow, 21, Albany Road, Redruth — Improvements in round frames for dressing tin and other ores. — Junury 13,
Islah Lewis and John Edward Price, 12, Westbourne Prace, Merthyr Tydvil. — Improvements in and relating to the cross or transverse movable bar of coal and metal mining and other vehicles. — Jun. 13.
John Isaac Thornycroft and John Edward Thornycroft, 48, Lincoln's Inn Fields, London. — Improvements in automatic apparatus for supplying feed water to steam generators. — January 13.
John Isaac Thornysroft and John Edward Thornycroft, 48, Lincoln's Inn Fields, London. — Improvements in steam traps. — January 13.
John Brown and Co (Limited) and Joseph Nodder, 47, Lincoln's Inn Fields, London. — Improvements in steam boiler furnaces and flues. — January 13.
John Brown and Co (Limited) and Joseph Nodder, 41, Lincoln's Inn Pields, London. — Improvements in steam boiler furnaces and flues. — January 13.

[92] John Brown and Co. (Limited) and Joseph Modder, 47, Lincoln's Inn Fields, London, - Improvements in steam boiler furnaces and flues. — January 13.

Itz Triomas Lees and David Maira Shaw, 184, 8t. Vincent Street, Giasgow.... Improvements in machines for crushing ores....January 11.

Thomas Lees and David Hairs Shaw, 154, 8t. Vincent Street, Glasgow—Improvements in machines for crushing ores.—January 14.

565 John Cameron Grabam, 18, Southampton Buildings, Chancery Lane,—Improvements in the electro deposition of metals.—January 14.

1549 Bydney Pitt, 24, Southampton Buildings, Chancery Lane,—Improvements in steam engines.—January 15.

155 Daniel Arthur Quiggin, 26, Castle Street. Liverpool.—Improvements in apparatus for feeding boilers. evaporators, and the like, and for brining evaporators.—January 16.

156 Joseph Barbe, 33, Chancery Lane, London,—Improvements in or connected with steam boilers,—January 16.

157 Joseph Barbe, 33, Chancery Lane, London,—Improvements in rotary engines and pumps.—January 16.

158 Joseph Barbe, 340, Rishton Lane, Great Lever, near Bolton,—Improvements in rotary engines and pumps.—January 17.

159 Charles Wilkinson, 26, Colemin Street, London,—An improvement in connection with water gauges for boilers and other generators of steam,—January 17.

150 Wilkinson, 25, Colemin Street, London,—An improvement in connection with water gauges for boilers and other generators of steam,—January 17.

150 Wilkinson, 25, Colemin Street, London,—An improvement in connection with water gauges for boilers and other generators of steam,—January 17.

151 January 17.

152 Francis discussed in January 18.

153 January 18.

154 January 19.

155 January 19.

156 January 19.

157 Ald Dougill and John Marks, 48, Lincoln's Inn Fields, London,—Improvements in generating apparatus for engines in which gas or vapour said air are used,—January 18.

JOINT-STOCK COMPANIES.

NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:

Wettern Exployers (Limits.1).—Registered Junary 23 by Francis and Johnson, 28, Austinfriars, E.C., with a capital of £53,000, divided into 50,000 shares of £1 each. Object: To adopt and carry into effect an agreement expressed to be made between the Western Explorers, Limited (incorporated in 1894) of the one part and this company of the other part; to acquire any mines, mining, water and other rights, grants, leases, claims, concessions, options of purchase, lands, estates, \$c.; to develop and turn to account the same in such manner as the company shall see fit; to carry on all kinds of exploration business, especially in relation to mines; to seek for openings for the profitable employment of capital; to search for, examine, and explore mines and ground supposed to contain minerals or precious stones, and to carry on the business of a mining, milling, smelting, and metallurgical company in all or any of its branches. The first directors—of wh m there shall be not less than three nor more than seven—are O. Hartridge, C. Bingham, A. M. Jay, F. Major, and G. Hardle (managing director). Qualification 100 shares. Remuneration £100 per annum each; Chairman £30 extra, manning director £250 extra. Registered of Capital and the first of the first directors—of whom there shall be not less than three nor miner than average of the first directors—of whom there shall be not less than two nor more than five—are to be elected by the signatories. Qualification, £30,00. Remuneration, £40 per annum, and 5 per cent. of the net profits remaining stee payment of 10 per cent. divided. Registered first directors—of whom there shall be not less than two nor more than five—are to be elected by the signatories. Qualification, £300. Remuneration, £400 per annum, and 5 per cent

Mr. Horatio Saqui, of Messrs. Saqui and Lawrence, has been elected to a seat on the board of the Donic Gold Mines.

FOR MINE, QUARRY, RAILWAY, AND ENGI-NEERING WORK, STORES, &c.

*M We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.

Use sate given is that by which tenders must be delivered, in nearly all cases further sufermation can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" shou'd be mentioned as the original source of the information, concerning which further particulars are required,

HOME CONTRACTS.

HOME CONTRACTS.

Railway Siding, February 4 (Kieton Park),—For the laying of a railway siding at Dug Kanner Quarry, Kiveton Park, for the Kiveton Park to Milling at Dug Kanner Quarry, Kiveton Park, for the Kiveton Park to Milling at Dug Kanner Quarry, Kiveton Park, for the Kiveton Park to Milling at Dug Kanner Quarry, Kiveton Park, for the Kiveton Park to Milling at District Council, For specification and forens of tender apply to Mr. 7. Pemberton, road surveyor, South Anston Cottage, Auston, Rotherban, or to Mr. James Snow Whall, clerk, 44, Bridge Street, Workson, Tenders to be set to the clerk by February 4.

Sleepors. February 6 (London, E.C.).—For the supply and delivery of cast iron pot sleepers, rails, find holts and nuts, gibs, and cotters, for the Madras Railway Company, as per specifications to be seen at the company's offices. Tenders to be delivered in essled envelopes addressed to Mr. Julian Byrac. secretary, 61, New Broad Street, London, E.C., marked "Tender for Bisepara" (or as the case may be), by 11 a.m. on February 6.

Pipe Laying, February 8 (Decapatrick).—For the laying of cast iron water pipes in connection with the laundry, &c., in the workhouse for the Guardians, according to a specification which may be seen at the Foor Law Office, Downpatrick. Acaled tenders addressed to the Chairman, may be lodged with Mr. J. W. Montgomery, clerk, up to 11 a.m. on February 8.

Railway Wagcons. February 10 (London, S.W.).—The Crown Agents for the Golonies, at whose offices the drawings will be on view between 10 s.m., and 9 p.m. (Saturdaya 10 till 2). A charge of £1 to be made for each specification. Tenders to be delivered in sealed anvelopes, addressed to the Orown Agents for the Colonies, at whose offices the drawings will be on view between 10 s.m., and 9 p.m. (Saturdaya 10 till 2). A charge of £1 to be made for each specification. Tenders to be delivered in sealed anvelopes, addressed to the Orown Agents for the Colonies, Downing Street, S.W., and endorsed "Tenders for Wagon Rolling Stook, Ug-anda R

"WHAT CANNOT BE CURED MUST BE ENDURED" need not be said to those who suffer from the effects of bad legs, scorbutic and scrotaious sores, as Holloway's Ointment and Pills are splendid specifies for these distressing afflictions. The carnest gratitude of thousands who have experienced the wonderful influence of these remedies, so that they have been raised from a position of prostrate helpicsness to one of ind-pendence and comfort, is being constantly expressed, both personally and by letter. Their value is known throughout the world for every form of disease. In cases of indigestion, agur, severs and discorders of the stomach and bowels, the Pills are an infallible remedy. For good, rheumatics, neuralgis, &c., the Ointment is a blessing to thousands of poor sufferers.

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THE ROYAL SCHOOL OF MINES.

ANNUAL DINNER OF OLD STUDENTS.

HE 23rd annual dinner of the old students of the Royal School of Mines took place on Friday evening in last week, at the Criterion Restaurant. Compared with previous dinners, the occasion was fully up to the average in the magnitude of its attendance, the enthusiastic character of the proceedings, and the cast and tone of the post-banquet oratory. The absence of Professor Rücker, who has gone to Cannes, under medical advice, was widely remarked and greatly regretted. No special feature, however, calls for mention. The absence of the asual musical accompaniment to the evening's entertainment was not made the aebject of any objection, and the opportunity thus afforded for giving an earlier termination to the toast list was generally recognised and welcomed. Those arrangements for the substantial comfort of the guests, which are so essential to a successful dinner, although they are sometimes apt to escape recognition, were ably and effectively carried out by Mr. H. G. Graves, the indefatigable honorary secretary, and the warmth and volume of the congratulations which were offered to him upon the satisfactory manner in which what is undoubtedly the most important industrial function of the year passed to its conclusion, must have gone far to compensate for the anxiety and labour involved in the work of organization. THE 23rd annual dinner of the old students of the Royal

Mr. A. G. CHARLETON, A.R.S.M., presided over an attendance Mr. A. G. CHARLETON, A.R.S.M., presided over an attendance well above six score in number, and was supported by—among others—the following gentlemen, the courtesy title being, for purposes of convenience, omitted:—H. A. Allen; H. Anstiss; R. J. Archbold; H. Bailey; E. G. Ballard; H. Bauerman, A.R.S.M.; F. Thorpe Becker; W. E. Benton, A.R.S.M.; E. Best; Professor C. V. Boys, F.R.S., A.R.S.M.; H. Brelich, A.R.S.M.; B. H. Brough, A.R.S.M.; C. Barrington Brown, A.R.S.M.; E. R. Budden; A. J. Campbell, A.R.S.M.; T. G. Chambers, A.R.S.M.; R. E. Commans; W. J. Cousins; S. H. Cox, A.R.S.M.; G. C. Crick, A.R.S.M.; W. N. Drew, A.R.S.M.; Arnold Eiloars, Ph.D., D.So.; A. Spencer Ellam, A.J.M. M.; A. D. Ellis, A.R.S.M.; Professor J. B. Farmer, M.A.; G. FitzBrown, A.R.S.M.; F. Fladgate, registrar; Dr. Martin O. Forster; Professor C. Le Neve Foster, D.Sc., F.R.S., A.R.S.M.; P. Fowler; E. W. A. D. Killis, A.B. S. M.; Professor J. B. Farmer, M.A.; G. FitzBrown, A. B. S. M.; F. Fladgate, registrar; Dr. Martin O. Forster; Professor C. Le Neve Foster, D.Sc., F.R.S., A.R.S.M.; P. Fowler; E. W. Gandy; Joseph Garland; W. Gowland, A.B.S.M.; S. Grady; J. C. Grant; H. G. Grave, A.B.S.M.; M. H. Gray, A.B.S.M.; W. H. Greenwood, A.B.S.M.; F. W. Grey, A.R.S.M.; W. H. Greenwood, A.B.S.M.; F. E. Harman; J. T. Hewitt, A.R.C.S.; J. W. Hinckley; H. A. Hinton, A.R.S.M.; G. T. Holloway, A.R.C.S.; Professor G. B. Howes; H. W. Hughes, A.R.S.M.; T. V. Hughes, A.R.S.M.; T. V. Hughes, A.R.S.M.; D. Huntley, A.R.C.S.; Professor G. B. Howes; H. W. Hughes, A.R.S.M.; T. V. Hughes, A.R.S.M.; D. Huntley, A.R.C.S.; D. James; J. H. Cordner-James; W. H. Trewartha-James; E. Janson; H. C. Jenkins, A.R.S.M.; Colonel J. Jocelyn; H. Chapman Jones; Professor J. W. Judd, C.B., F.R.S.; B. Kitto; J. G. Lawr, A.R.S.M.; J. Layrell; J. Leechman, A.R.S.M.; D. A. Louis; E. R. Lowe; E. T. McCartby; Bedford McNeill, A.R.S.M.; W. McNeill, A.R.S.M.; H. C. McNeill, A.R.S.M.; W. H. Merritt, A.R.S.M.; F. Merricks, A.R.S.M.; Bichard J. Middleton, F.G.S.E.; W. J. E. de Müller; H. F. Olds; Professor F. J. M. Page, A.R.S.M.; Sir A.R.S.M.; F. Merricks, A.R.S.M.; Richard J. Middleton, F.G.S.E.; W. J. E. de Müller; H. F. Olds; Professor F. J. M. Page, A.R.S.M.; Sir Thomas Parkyns, Bart.; J. S. Pearce; E. H. Peers; A. G. Phillips, A.R.S.M.; H. V. Rudston Read; G. B. Reynolds; R. C. Richards; W. G. Ridewood, A.R.C.S.; Professor W. U. Roberts-Austen, C.B., F.R.S., A.R.S.M.; J. W. Rodger, A.R.C.S.; T. K. Rose, A.R.S.M.; E. Shaw; H. G. Scott; E. A. Smith, A.R.S.M.; B. J. Smith; A. Stansfield, A.R.S.M.; L. Sumner; A. Sutton, A.R.S.M.; P. A. Thomas; C. W. Thompson, A.R.S.M.; H. Thornton; Professor W. A. Tilden, D.Sc., F.R.S.; C. Tookey; E. M. Touzeau; M. Wagner; G. A, Watermeyer; D'Aroy Wentworth; C. W. Wetzlar; A. Gordon Wilson, A.R.S.M.; M. A. Woodward, A.R.C.S.; G. H. Wyatt, A.R.C.S.; Professor W. P. Wynne, D.Sc., A.R.C.S. The board having been cleared,
The CHAIRMAN, who was received with cheers, proposed the toast of "The Queen and Royal Family," saying:—Although we may be insular, not to say isolated, and called "a nation of shopkeepers," I think you will agree with me that it has always been re-

keepors," I think you will agree with me that it has always been recognised by a gentleman to be the first duty of Englishmen to "Fear God and honour their King," sentiments associated in the patriotism which has knit together the British race, and rallied it round the Union Jack, wherever and whenever it has been menaced round the Union Jack, wherever and whenever it has been menaced by hostile nations. This is, in fact, the keystone which supports and must continue to uphold the United Kingdom. As a native by birth of Jersey—one of those small islands which have always been conspicuous for their loyalty—(cheers)—patrictism is a sentiment which naturally appeals to me, as I am sure it does to you all. As miners in professional relationship we owe loyalty to our industry and to me another, and to those dependent on me, over employs and and to one another, and to those dependent on us, our employes and comrades, as well as to those on whom we depend—our employers. As associates of the School of Mines, a Royal school founded under As associates of the School of mines, a hoyal school founded under Royal patronage, we owe loyalty to our Sovereign, and sympathy in her present family sorrow. (Hear, hear.) I, therefore, invite you to join with me in drinking the health I have now the honour to propose of "The Queen and the Royal Family," who are inseparably identified with the industries with which all of us are directly, or indirectly, connected. Long and happily may Her Majesty reign over a peaceful, prosperous, and patriotic people. (Cheers.)

The toast was cordially honoured.

The CHARMAN then submitted the toast of the evening—"The Mining and Metallurgical Industries." He said: Gentlemen—I rise to propose a toast which is always welcomed with enthusiasm and drunk with applause at these dinners—"The Prosperity of the Mining and Metallurgical Industries"—a toast, I feel confident, you will drink on the present occasion with the acclamation it invariably I am not going to attempt to review the scientific progres efforts. I am not going to attempt to review the scientific progress of the past year in any detail to-night, as it would be a task too wast to chronicle a fraction of the many discoveries made, which summed up together carry us many steps forward along the path of progress and knowledge, in perfecting existing processes and in affording a key to the solution of new problems. The discovery made by Professor Ramssy that beliam exists in gas cavities in certain terrestrial minerals cannot, however, be passed over without reference, showing. nerals cannot, however, be passed over without reference, showing it does, that unsuspected and unexplored fields still lie open to the peralogist, and adding fresh laurels to the long and illustrious records pare science. Following in the wake of the meteor, incandescent, tylene gas, produced from calcium carbide, made in the electric arc noe, appears amongst "this season's novelties," and may prove a nidable rival to other illuminants, if the carbide can be obtained midable rivat to other intuminates, it see control can be considered as sufficiently cheap rate. The photographs obtained by Rontgen, e Wurzburg professor, with the light of a Crooke's vacuum tube, which he professes to be able to see through a deal board, may useful, not only in surgery, but in metallurgy and diplomacy, if ey only enable us to expose the internal structure of metals, and at a sufficiently cheap rate. the Wurzburg professor, with they only enable us to expose the internal structure of metals, and obtain an impression of our neighbours' designs, as well as their bones, on a sensitized plate. Turning to fields which more nearly concern the miner and the metallurgist, investigations lately carried on and discoveries made point to a probable solution of that prickly problem, a satisfactory commercial method of dealing with silver lead sinc sulphides, and to the wider application of dilute cyanide lead sine sulphides, and to the wider application of dilute syanide solutions and matte-smelting to the treatment of certain classes of goldores. Important as these matters are, however, I wish rather to call your attention to night to the economic importance of recent gold discoveries in South Africa, Australia, and on the American Continens, as they deeply concern, not only the School of Mines, but our industries generally. Wherever we turn at the present time we see around us widespread commercial depression, old established industries tottering to their fall, if not rained, the very credit of nations shaken, and, as a consequence, ominous war clouds gathering, now on this side, now on that. If we seek the reason for this state of things, I think it will be found to arise from two primary causes—partly this side, now on that. If we seek the reason for this state of things, I think is will be found to arise from two primary causes—partly owing to the absence of a common fixed standard of value in gold and silver-using countries (in consequence of which one-half of the traders of the globe are separated from the other half), partly owing to the disproportion which the world's metallic banking reserves bear to the disproportion which the world's metallic banking reserves bear to the increased credit required by its rapidly-growing populations, by whom all civilised countries are at present overflooded with com-

modities produced at a cost which will barely repay the price of their production. At various periods of the world's history since barter has been abolished, a scarcity of the precious metal in labour-congested production. At various periods of the world's history since barter has been abolished, a scarcity of the precious metal in labour-congested countries has been responsible, I believe, for a series of wars (£c!) awing on cycles of peace), which may have been partly the result of personal ambition, but were more largely owing, I think, to the economic cause I have cited; which rendered ambitious or revolutionary wars possible, nay popular; transformed the agriculturalist and artisan into a soldier, and so curtailed the production of commodities, until a condition of things was reacted. of commodities; until a condition of things was re-esta-blished favourable to profit making in a larger or less degree, under which everyone who chose to work could earn a decent livelihood without any extraordinary effort. If this view is correct—and the fact that we often hear of labour diffiearn a decent livelihood without any extraordinary effort. It this view is correct—and the fact that we often hear of labour difficulties, currency troubles, and ramours of wars together, lends it some support, although let us hope no nation at present would willingly draw the sword except to protect its most vital interests and maintain its national honour—it is evident that one of the most pressing needs of modern civilisation is a rapid and large addition to the world's existing stock of gold, and whilst it may be doubted how far it is possible to supply this international want which modern trade has created, except by the discovery of alluvial fields comparable in richness and extent with those of the early days of California and Australia, the output of gold from vein mining, is luckily undoubtedly on the increase. Still, in view of the vast sums hoarded in war-chests and elsewhere, the imperative demand for more gold is clearly shown by the feverish activity exhibited in gold mining everywhere, and unless we are prepared to re-establish a recognised international ratio of value (such as formerly existed in different countries) between the two precious metals, in order to relieve the strain which the credit of gold alone seems at present too weak to support without material assistance of some sort, we are bound not only to protect, but to largely extend our gold mining industry at all hazards, or international peace, which we all desire to see maintained, must be some day, I fear, very seriously imperilled. Let us hope that this question can be settled by "the miner's pick," but whether this be so or not, the immense importance of a School of Mines as a national institution to train the necessary men for the prosecution and extension of the mining and metallurgical industries grows every day so or not, the immense importance of a School of Mines as a national institution to train the necessary men for the prosecution and extension of the mining and metallurgical industries grows every day more apparent. But it is only on occasions like the present that the "outside public" are reminded of the work its associates have done in the past, of what is now being done by the school, and of the role it is bound to play in our future national development. The roll of our associates will be found to contain the names of men distinguished in every department of science—of men who have won fame for themselves, and carried the civilising seeds of knowledge only to be gained by the training such a school affords to every quarter of the globe, a knowledge for which they are indebted to its distinguished professors past and present. At this moment we cannot but regret the absence of many of our friends called elsewhere by duty, but looking forward to the future I see foreshadowed for the School of Mines, I think this is a most significant fact, for whilst the school fits those who graduate from it to adorn the ranks of those who devote themselves to the pursuit of pure science, it also prepares them to qualify who graduate from it to adorn the ranks of those who devote themselves to the pursuit of pure science, it also prepares them to qualify in two of the most important branches of engineering, mining, and metallurgy. The engineer, be it recollected, in some shape or other, is a contributor to, if not the "prime mover" in, every branch of material progress, but each fresh advance in a new direction is largely dependent upon the quality and supply of the materials which it is the special province of the miner to provide—the useful and precious metals. Since all solid work demands time for its execution, I am of conjucts that the good work initiated by the School of Mines will conof opinion that the good work initiated by the School of Mines will go on growing as its associates get more numerous and obtain that expe-rience which age alone confers. The fruits of their training are already shown by the many valuable "papers" contributed by its forme pupils to the transactions of various engineering societies—the Civi Engineers, the Iron and Steel Institute, the Federated Institute, and that younger but useful society, the Institute of Mining and Metal-Engineers, the Iron and Steel Institute, the Federated Institute, and that younger but useful society, the Institute of Mining and Metalurgy—(cheers)—which was founded by School of Mines men for the discussion of matters relating to metalliferous mining, and to afford a meeting-place for miners in the City. Time was when but few men could be found practising as engineers who could claim the distinction of being associates of the School of Mines, but times, even within my short recollection, have marvellously changed, and large corporations are springing up in all parts of the world, the general management of which is found to demand special preliminary training, and capitalists are beginning to recognise that, in order to successfully carry on mining undertakings in foreign countries, commercial business ability and scientific mining and metallurgical knowledge must be added to practical mining experience, all of which are equally indispensable for the protection of the vast interests connected with the inception and safe conduct of mining operations on a large scale. In those two branches of the profession alone which deal with the production of the precious metals there is enormous scope, as I have shown, for the energies of our associates who have already, or may hereafter, qualify themselves for the management of such undertakings, and a register of old students has been lately started to bring mine owners and men on the look out for appointments together. Short-sighted people looking no further than the point of their nose regard gold - mining, I believe, as a "high road to rain," forgetting that a "gold rush" is generally the first event that paves the road for civilisation and enlarges or creates fresh arteries for the circulation of trade, upon which Regland's prosperity depends, and that by attracting capital and encouraging emigration, it contributes, in one way or another, to the or creates fresh arteries for the circulation of trade, upon which England's prosperity depends, and that by attracting capital and encouraging emigration, it contributes, in one way or another, to the support of millions of our toiling masses at home. It is the prospector first, the miner later on, who draws industry to distant fields and develops them, in doing which he does his couptry yeoman service. To promote enterprises of this nature, however, one must have capital, to obtain capital one must secure confidence, to command confidence one must produce men who possess the necessary knowledge to employ capital profitably, and although everyone nowadays may write M.E. after his name, I am convinced that the mining engineer of the future who will command most universal confidence will be the man who holds a School of Mines' diploma, combined with the requisite after experience in and about mines, as a School of Mines by its training must enable its associates to weigh evidence with accuracy, check the promotion of mining swindles, and so enlarge racy, check the promotion of mining swindles, and so enlarge the scope of legitimate mining enterprise. In the strained relation-ship in which we stand to other countries, it is most gratifying that ship in which we stand to other countries, it is most gratifying that the kindly feelings we entertain towards American mining men, are equally expressed by them towards us, in the leading organ of mining opinion in the United States, the American Mining Journal, It would be an eternal blot on the history of the nineteenth century if anything but friendly rivalry was ever felt by one great section of our race towards another; and I hold it to be the duty of all of us who belong to one profession and one common stock, to exercise the wide influence we possess to promote Anglo-Saxon unity and sympathy of thought and action, towards which Imperial federation will be, I hope, a first step. (Cheers.) Gentleman, I feel tion will be, I hope, a first step. (Cheers.) Gentleman, proud, as I am sure you all feel proud, of the School and prof to which we belong—(cheers)—and in proposing the toast of the mining and metallargical industries, I do so feeling confident of their boundless powers of expansion and self support. In giving you shis toast I couple with it the names of Professors Roberts-Austen this toast I couple with it the names of Professors Roberts-Austen—(cheers)—and Dr. C. Le Neve Foster—(cheers)—both of whom are professors and associates of the School of Mines. Metallargists owe a deep debt of gratitude to Professor Roberts-Austen for his researches into the composition of metallic alloys, whilst Dr. Foster, in addition to much practical and valuable work in other directions, has lately enriched the literature of our profession by the publication of his standard work on ore-mining. The fruits of these labours must have a lasting influence on the development of the mining and metallurgical industries, to the success of which I now ask you to drink. (Cheers.)

drink. (Chears.) Professor Roberts-Austen, who was greeted with cheers, in replying to the toast, said; Mr. Chairman and Gentlemen—Often as I have responded in this room to the toast of "The Mining and Metallurgical Industries," never have I done so with greater pride than I feel on this occasion—(cheers)—partly because there is a larger gathering of old associates than on any previous occasion,

passed so recently—events in which we, as a nation, have ma listory, and which have made us so proud to open our Times of norning—have shown us that the national defences of the country with which our very existence as an empire is bound up, depen ir passed so recently—events in which we, as a nation, have made history, and which have made us so proud to open our Times of a morning—have shown us that the national defences of the country, with which our very existence as an empire is bound up, depend of the country with which our very existence as an empire is bound up, depend of the country with which our very existence as an empire is bound up, depend of the country with which our very existence as an empire is bound up, depend of the progress made during the year, I need not attempt to give you anything of a set speech; indeed, I am quite unable to do se, because up to within a very few minutes of leaving home for this place, I did not think it would be possible for me to come here; You must, therefore, allow me to say pretty much what comes into my head. But I may remind you, as some evidence of what we can the within a year, that at a few hours' notice we can make armour plates which the best shells will not pierce, that we can study the movements of projectiles at fearful velocities, and yet that we can keep our eyes open to observe the most minute atomic movements. There are, however, other and more serious matters to which I must turn. I am never tired of telling my own students that we metallurgists have not merely to deal with metals, but with men, and the way in which our associates are widespread over the world brings home to us, as nothing else can, what English colonisation really means. (Hear, hear.) Of course, the primary object of having a colony is that there should be somewhere to send School of Mines men to — (laughter and cheers) — but we never forget that under our fing—under the rule of Her Most Gracious Majesty the Queen—there is perfect liberty and fraternity for everybody. The singular thing is that the questions which have given rise to the difficulties which have recently created such great thoroughly. British process—the cyanide process, by the aid of which no less than £2,500,000 sterling has been extracted from ore during th

we have no desire to extend our boundaries—but it is peace to go on quietly with the development of the mining and metallurgical industries. (Cheers.)

Professor LE NEVE FOSTER, who also responded, rising amid enthusiasm, said: Mr. Chairman and Gentlemen—Up to the present the remarks of the various speakers have been mainly directed to the British colonies. If you will allow me, I will turn my thoughts and remarks homewards—(hear, hear)—and say semething about the past year's mining events, so far as we are concerned, in the United Kingdom. Perhaps you will allow me to drop the professor, and speak to you from another side of my personality—for, if have, as you know, a sort of dual existence—moulding my remarks from the point of view of one of Her Majesty's Inspectors of Mines. I am glad to be able to say that the year 1855, so far as mining socidents in this country are concerned, has been a good year. It was not a record year, but, with two exceptions, the list of deaths from accidents in mines is the smallest on record since the year in which statistics were first collected—the year 1850. It is pleasant to look back through the medium of statistics and to find that mining though certainly a dangerous occupation, is steadily year by year becoming safer. The miner has now a less hazardous existence. If we look back to the early fifties we find that out of every thousand employés in mines about \$\frac{1}{2}\$ perhade annually from accidents. When, on the other hand, we look at the statistics of the early nineties we find that the number is reduced to \$1\frac{1}{2}\$, so that, practically speaking, mining is three times as safe as it was about the time when the School of Mines was founded. That, I think, is a record of which we, as Englishmen, have a right to be proud. I do not mean to say that we are better than other people. We are the time when the School or Mines was founded. That, I think, is a record of which we, as Englishmen, have a right to be proud. I do not mean to say that we are better than other people. We are better than some, and real progress is still being made, and mining is becoming safer, as well as in many cases more profitable. It may interest some people present to know that in addition to mines, other mineral workings are now being put under Government inspection. We hope this year to be able to publish further statistics relating to the output of quarties in this country—(hear, hear)—and to give we nope this year to be able to paolish darcher statistics relating to the output of quarries in this country—(hear, hear)—and to give you a better picture than we have given you hitherto of mineral working in the United Kingdom. Many of us are interested in Cornwall, the nursery of home mining, and it is pleasing to find that our old dry-nurses, so to speak, are adopting modern processes, going in for vertical shafts and improving methods all round. While I speak of Cornwall I should say that it is with great regret that I miss from our midst one constant attendant at these dinners. While I speak of Cornwall I should say that it is with great regret that I miss from our midst one constant attendant at these dinners—not an associate, it is true, but a good friend of the Sohool of Mines—in my old friend, Mr. William Thomas, of Camborne. (Cheers.) He, unfortunately, has been prevented from being here to-night by the sudden death of his father, who likewise has been a good friend of my own and of the students in the school, enabling them to visit mines, and giving them assistance during their stay in his county. (Cheers.) We also remember, as students of the school, that one of the associates well known to all of ur, Mr. Henry Louis, has been chosen as the Professor of Mining at the Durham College of Science at Newcastle. (Cheers.) It is pleasant for us to think that they have come to the School of Mines for a professor for this great home of coal mining. (Cheers.) We feel sure that he will maintain the reputation of the school in that great Northumberland and Durham coal field, producing almost as much coal as umberland and Durham coal field, producing almost as much coal as the whole of France and more than half as much as is produced in the German Empire. (Laughter.) We feel quite sure that he will maintain the honour of our school, and are proud that he has been chosen.
Your Chairman mentioned that a register of the old students of the
school is being prepared, and that one of its purposes will be to put
the capitalist into communication with the student. As old students, we shall be glad to read the record of our fellow students—(hear, hear)—we shall treasure the book, put it upon our shelves, and, no doubt, hand it down to our children. The book is one I would commend especially to all here, and I hope that all who are seated round the table to-night will put down their names as subscribers for copies, and that some of them will even help the committee by consenting to become guarantors. I do not think there is much fear of the guarantors being called upon to pay anything, because Mr. T. Chambers, who is the secretary, tells me that the book will be sold at 6s. a copy, and I believe enough copies will be sold to defray all the expenses of publication. The book is one that is wanted, and one that will be valued by all of us. (Cheers.)

Mr. GRAVER, the honorary secretary, rose to make a statement in connection with the publication of the register, saying: I have here a paper which the Secretary of the Register has given to me, and we shall be glad to read the record of our fellow students-(hear,

a paper which the Secretary of the Rogister, saying: I have here he wishes it to be passed round for subscriptions to the guarantee fund. The heading on this paper is as follows:—"We, the undersigned, hereby agree to guarantee towards the cost of the publicasigned, hereby agrees to guarantee towards the cost of the profits-tion of the register of the associates and old students of the Royal College of Science, and the Royal School of Mines, a sum not greater than that affixed to our signatures, any deficiency less than the total amount of the guarantee fund being subscribed by us in the proportion that such sums affixed to our signatures bear to the whole fund guaranteed." (Hear, bear.) I shall have the pleasure of passing this paper round, and hope to see a good sum subscribed towards the guarantee fund. I ought to say that this is subscribed towards the guarantee fund. I ought to say that this is a matter of form, and it is highly improbable that anybody will be called upon to subscribe anything towards their guarantees, so that all may guarantee largely. (Cheers.)

It was subsequently stated that the sum guaranteed amounted

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Professor F. J. M. PAGE, A.B.S.M., proposed the toast of the "Professors, past and present." He said: In most gatherings of students the toast I have to propose would, I think, be received with mixed feelings. The toast of the professors is sometimes accompanied by ideas of restriction, and the preparation for mining examinations—with all sorts of unpleasant notions, in fact. Well, 1 a think in our case there is nothing of the sort to be feared. We not over bothered with examinations, and the professors endead —or at least they did in my time, and I feel sure they do now

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tesch us to learn and not to cram us for the next examination. There are very few places in London, I think, where the same thing can be said, And then when we get a little further on in our careers, they are always ready to give us problems to solve, and to explain to us clearly what we are to do. There is a story told of an American student at one of the German Universities, who had not American student at one of the German Universities, who had not seem there many weeks before a professor came to him and suggested they should produce a joint paper—a thing sometimes done in Continents circles of learning. The student was to investigate some abstrace subject, and the paper was to be published in their joint names. Accordingly the work was done, and the paper printed. Some years afterwards, when the student had got back to his native country, and was a professor himself, a gentleman was shown into his laboratory, who gave the American to understand. The American student who had become professor read the paper for a few minutes, and then said:—"My dear Sir, when this paper was written there were two persons in this universe who understand. The American student who had become professor read the paper for a few minutes, and then said:—"My dear Sir, when this paper was written there were two persons in this universe who understood it. Herr professor is dead, and the Lord only knows what it means; I don't." (Laughter.) At the School of Mines we get an intelligent education, and know, at all events, what we are doing. When I come to the second part of this toast—the past professors—it is with feelings of solemnity that I think of those who have passed away from ns. When I read to you the names of Hoffman, Ramsay, Percy, Smyth, Willis, and Tyndall, and last, but not least, the great Huxley, we can only speak and think of them with reverence. Three, I believe, of the past professors are still with us; two of them—Lord Playfair and Sir George Stokes—have been seduced into political affairs. One of them—Professor Roberts

months to determine G. He really has amazed us with his versatility. But you all know we must come to geology if we want to find the solid foundation for everything, and so I have pleasure in coupling the name of Professor Judd with the toast. (Laughter and cheers.)
The toast having been received with peculiar heartinese, Professor Judd, which coast in such kindly terms referred to me as a solid foundation, but I rather suspect that those who arranged the toast list placed me in the position of replying to it on different grounds, the toast is that of the past and present professor, and cannot help thinking that, looking at the history of the school, he may have thought that as there is not a past professor here, the next best thing would be to get a present professor who is so old that he sanote he a present professor much longer. (No, no.) On these grounds, perhaps, I have been chosen to do the double daty of responding to this toast. There will not, I think, be much difficulty in my responding to this toast from one point of view, for I have had the good fortune to be both stadent and professor with all the best professors except Edward Phillips, and I am perfectly certain of one thing—that in their feelings towards the past 'and present students of the Sohool of Mines they have such unanimity of sentiment that one can speak for all. One and all cf as remember with the greatest pleasure the intercourse we have had with you, and we meet you on this recurring coassion ever with renewed pleasure. (Cheers.) As the years go on the professors suffers no increase of trouble, but he does get an increase of responsibility. In the first place the classes—I am sure the students will be glad to hear—are always getting larger and larger, and then the poor old professor has to do the best he can to keep up his connection with the past industry and the professors. I will confide the more interesting about, and he sends me the most interesting specimens. My inclications would lead me at once to set towerk at these beautiful reery rapidly, and showed his legs reaching a long way out of his trousers and his arms thrust too far into the sleeves of his jacket. (Laughter.) I really think that design would admirably suit the Royal School of Mines. From our very foundation, right up to the present time, we have been growing out of our clothes. We had not been established more than twelve months at Jersynstreet before the chemists were in Marylebone-street. Then the people down in the lower quarters began bursting their bounds, and eventually they broke through into the cellar next door, where they began to do their work. After another interval the chemists went up to Oxford-street, and I believe there are some of the Oxford-street men here now. After that, some of us had to go to Kensington, and we did not stop growing there, because the mining men and the physical men are now over the other side of the road. As for us geologists, we have got so far away that some of us doubt whether we ever could have come from the parent stock. (Laughter.) Well, I do not say that this is a fortunate thing, but I can—or, rather, I cannot—imagine a thing which would be still more unfortunate. Supposing the Government were to provide a splendid building—something like the one at Strasburg—and we were unable to fill it! That would be still more unfortunate—(cheers)—but do not think there is very mach danger of such an eventuality. the word in that sense, are accomplishing is a work of the most

I hope that the School of Mines is more flourishing than it ever before. I am sure that, on an occasion like this—responding, as I am, for the past and present professors—I must not sit down without all dilings to that great man who was the link between the past at and the present. It is a difficult duty for me to perform, who was first a stadent and then a fellow professor with him, and always a friend of his. It is difficult for me to speak as I would like to do of Professor Huxley. I have sometimes fell a great regret that, of the student and then a fellow professor with him, and always a friend of his. It is difficult for me to speak as I would like to do of Professor Huxley. I have sometimes fell a great regret that, of the students of our school, those engaged in mining and metallurgy were not brought into personal contact with him. There were some, I believe, who actually fancied that he had not a great deal of sympathy with those branches of the School. Any one who held that opinion was so far from the truth that the idea was even a more ridiculous one than the notion of some of those men who used to live downstairs in my time, and who were fond of saying that is, the old black cat there would run away when Professor Huxley came near, because it was afraid of being dissected. (Laughter.) Professor Huxley had three cats at home who followed him about, and I know from many chats with him that the one misery of his duties which, like dissecting, were rendered so distasteful to him by the his love for all living things. He was a man of the gentlest nature, and one who inspired love in all who were brought in contact with him. I need not say a word about the great position that will be maintained in foture. I hope that so long the theorem of the professor Huxley occupied so great a position there. He might had an experiment of the professor Huxley occupied so great a position there. He might had an experiment of the professor Huxley of the school of Mines entitle all view who had the reference of the school

I say we should listen to you with delight and pleasure. (Loud cheers.)

Mr. G. T. Holloway submitted the toast of "The Learned Societies." He said: In proposing the toast of "The Learned Societies." He said: In proposing the toast of "The Learned Societies" on behalf of such a gathering as this, I am encouraged by the knowledge that it is one which will be supported by all with the same enthusiasm as has been accorded to it in times past. It would be difficult to name any manufacture in whose pie the learned societies have not had a finger, but they may be said to have had a whole hand in the pie compounded by those engaged in the mining and metallurgical industries—not to remove anything but to add valuable ingredients which have improved it to an extent that would astonish the rule-of-thumb workers of the past, could they return to earth and visit some of our modern establishments. Founded as they were for the advancement of scientific knowledge, apart from monetary considerations, the result of their labours has always formed a rich grazing ground for those of us who are commercially minded, and the result has been so beneficial that many who have been successful in those commercial pursuits of which science is the basis, have also turned their attention to science for its own sake. (Cheers.) It would be useless to attempt to enumerate the various industries have also turned their attention to science for its own sake. (Cheers.) It would be useless to attempt to enumerate the various industries to which the learned societies have extended a helping hand, more especially as the principal have been dealt with in the toast of the evening and in the replies to it. Perhaps I may be permitted to refer to a statement published within the last few weeks by M. Moissan, and deserving the careful attention of those interested in the metallurgy of aluminium. The failure of this metal to answer expectations as a material for boat-building, and for many other purposes, has usually been attributed mainly to the presence of iron and silicon; but M. Moissan is of opinion that it is rather due to the small amount of sodium which he finds to be present in all commercial aluminium, whether prepared chemically or electrolytically. So far as I am aware, no process is known by which aluminium free from sodium is obtained on a commercial scale, and the attention of metallurgists might well be directed to this problem, whose

cally. So far as I am aware, no process is known by which aluminium free from sodium is obtained on a commercial scale, and the attention of metallurgists might well be directed to this problem, whose solution may lead to a revolution in the aluminium industry. It is my pleasant duty to couple with this toast the name of Professor Tilden. The connection of Professor Tilden with the Royal School of Mines, and the honourable position which he fills in the Royal Society and the Chemical Society are too well-known to us all to require further comment on my part, but it may not be so generally known that the improvement in the professional status of the analytical chemistis largely due to his efforts as President of the Institute of Chemistry. (Cheers.)

Professor TILDEN, in acknowledgement, said: This is a toast which has assumed, from long usage, a sort of stereotyped character, and I am not quite sure whether Mr. Holloway quite realises what he has put upon my shoulders. Perhaps you hardly realise the extent to which learned societies exist in this country. If you look at the catalogue you will find that there are something like as thousand bodies in this country which claim, with greater or less show of justice—(laughter)—the title of a learned society. The operations of some of these societies, I must confess, I do not clearly understand. For example, there is the Balloon Society, which is mentioned in the list, but whose proceedings I must confess I never have been able to understand. Do the members of this society keep a sort of tame balloon in the back garden, and do they spend part of their livos in making ascents, or is the name of the society only a poetical way of expressing that the members of the society has lately been making some kind of effort to decrease the volume of noises that exist in the streets of London and other great towns. (Laughter.) Perhaps the members of the society find the silence of the higher regions so delightful that when, for a short time, they return to earth, they cannot endur chactic condition in which we live. Then there is the Society of Authors, which claims to be a learned society; but I sometimes doubt whether the institution embodies a great deal of wisdom. It is an uncommonly easy thing—I daresay many of you have tried it—to write a book, but it is a most difficult thing—as I know from experience—to get rid of the consequences of your folly. (Laughter.) The two or three little books that I have ventured to write are a perpetent and perennial nuisance to me. (Laughter.) To speak seriously, however, I suppose Mr. Holloway means by the learned societies those societies which are more immediately concerned in the progress of science, and no doubt the work which the learned societies, using the word in that sense, are accommishing is a work of the most

supreme importance to the welfare, not only of the mining and metallurgical industries, but of the whole civilised world. Still, those who take part in the work of these societies cannot help feeling that times are changing very rapidly the conditions under which science is pursued at the present time. A century ago, of course, there were no learned societies, except the Royal Society, and in those days people did not write little papers every week and fire them off at their unfortunate fellow members; nor did they fill the pages of numerous journals with the results of their experiments or speculations. What they did, a hundred years ago was to continue, steadily and laboriously, working out a subject, and maturing their thoughts, after which they were permanently embodied in the form of a book, when a sufficient time had elapsed for them to have at ained maturity. In these days the scientific societies exercise their operations in such a way that they overlap one another, and the bulk of scientific literature is becoming so enormous as to be positively appalling. Everyone who belongs to one or two of these societies finds that he cannot provide shelf-room for the literature that is perpetually flowing in upon him. I cannot say how many yards I have to send every year to the bookbinder, but it is getting a serious matter, and I do not know what will be the consequence if this continues. (Hear, hear.) I cannot help thinking that some system of co-operation should be arrived at between the various leading societies in the civilised world, whereby the bulk of literature produced should be reduced, and the results of investigation rendered more accessible to those who are interested. I feel it a great compliment to have been associated with this toats, but I hardly know how to thank you on behalf of the learned societies, since I have not been able to communicate with them for the purpose of ascertaining their sentiments. (Laughter.) One of the advantages, however, following upon association with the learned socie

The Visitors."

the Royal School of Mines. (Cheers.)

Mr. M. H. Gray proposed in a few well chosen words the toast of "The Visitors."

Mr. RICHARDS, who was associated in name with the toast, in reply, said: My first duty is to thank you on behalf of the other visitors and myself for your extreme kindness and heartiness upon this occasion. My second duty is of a mixed character. When I received your very kind invitation to be present to-night I could not help feeling somewhat embarrassed at being bidden to such a learned assemblage. From time to time I have seen many mining reports, and having become familiar with many of the expressions therein used, I have come to have had a certain sympathy and admiration for those who wrote them, feeling that they must not only have studied very closely the particular sciences in which they are engaged, but must also have had a wonderful acquaintance with Johnson and Webster, and other authorities upon the English tongue. (Laughter.) Having humourously played upon the words liquidation, mastication, and lixiviation, the speaker proceeded: Something has been said to-night about recent discoveries, but there is one discovery which seems likely to overwhelm the School of Mines and Metallurgy, in which you are more particularly interested. I refer to the new discovery with regard to certain rays of light. If we have gots of art that we can discover by means of these rays what is going on in the human body, it is only a very short step to discover what is going on in the bowels of the earth. (Laughter.) I may mention another reason which caused me considerable alarm in accepting your hospitality to-night. I was once at school and it was my duty from time to time to study various written rules and examples. One saying which particularly impressed itself upon my mind was this:—

Effective and it felt that in his company and the company of other guests who are present, I could venture into the presence of gentlemen who are engaged in such nefarious projects. (Laughter.) In conclusion, the speaker

foremost position in the world to the qualities of self-dependence which the School of Mines was bent upon developing amongst its students.

Mr. BENNETT BROUGH, in proposing the health of "The Old Students," said: The only drop of wormwood in the cup of joy with which I am going to drink this toast is the reflection that all the things I should have liked to say have been already said by Mr. Roberts-Austen, Mr. Le Neve Foster, and Mr. Page. But looking round the room I see that we have present a very large number of distinguished old students. We have Mr. Bauerman, who was the very first student in the school, and we have Mr. Percival Fowler. Amongst the professors of the school present are Mr. Judd, Mr. Roberts-Austen, and Mr. Le Neve Foster, who are old students, and Messrs. Boys, Jenkine, and Woodward, and many more of the assistant demonstrators who also received their training at our school. Then, looking at the practical side, we find that some of the most important coal-mining positions in this country are held by men like Tilden-Wright, Hughes, and Benton, who are also old students of the school, while with regard to metal we have, besides our Chairman, men like Barrington-Brown, Seymour, Claudet, and Harmon, many of whom are present to night. Then, as regards the metallurgists, we are proud to think of Thomas and Gilchrist, whose discoveries have done so much towards the metallurgy and development of steel, and also of Matthay and Bauerman. (Cheers.) During the year we have had valuable contributions to technical literature from old students. Professor Tarner has favoured us with a book on iron and steel, and Mr. Rose, of the Mint, has given us an equally valuable book on gold. This activity in the metallurgy of steel continues. At the meeting of the Iron and Steel Institute last autumn, three of the papers were read by old students—by Mr. Hughes, Mr. Kameneky, and Mr. Wiggin. It is true that these papers probably were not altogether appreciated in Birming—ham as they deserved to be. I remember myself —places like Botany Bay—where we send School of Mines men—(laughter)—we find that in Australasia, India, and Canada, not only are the most important positions on the geological survey held by old students, but also that the less honourable but more lucrative practical positions of managers of mines are held by our old men, and I have just learned that even in Transylvania there are as many as seven associates of the School of Mines engaged in gold mining. (Hear, hear.) In South Africa, as has been already pointed out, there are a certain number of our men who are at present incapacitated from dealing with their professional duties—(laughter)—but we find that the most successful mine in the Johannesburg district—the most prosperous and the largest—is managed by Mr. Johns, an old student of the school, (Cheers.) During the year, moreover, the standard work on the Gold Fields of South Africa came from the pen of two gentlemen, one of whom, Mr. Chalmers, is a distinguished associate. Unfortunately, all our old students are not doing so well. Some years ago I happened to be in Johannesburg, and I was assured on most credible authority that one of them was occupying the somewhat responsible, but hardly metallurgical, post of master of the coremonics at a dancing saloon, and I have recontly been told by a gentleman in this room, who has just returned from a distant part of the Transvaal, that he was passing a little wayside hostelry there, when the door suddenly opened, and he saw a human form passing in a graceful parabolic curve through the air, in which he was able, when is had landed on the ground, to recognise an old student. (Laughter.) This gentleman had taken exception to a Boer's method of addressing him, with the result that his Dutch friend had thrown him out of the establishment, With this toas? I have to couple the name of one of our old associates, who is not only a thoroughly practical and experienced mine manager, but also a living example of the advanestablishment, with this tosas I have to couple the name of one of our old associates, who is not only a thoroughly practical and experienced mine manager, but also a living example of the advantages of a scientific training, since with the aid of his mineralogical knowledge he was able some years ago to

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discover in Australia an important deposit of the mineral alunite that had not hitherto been known to exist there. Gentlemen, I give you the toast of "The Oid Students," coupled with the name of Mr. Herbert Cox. (Cheera.)

In responding, Mr. Cox said: Mr. Chairman and Gentlemen—I have to thank you on behalf of my old fellow-students and myself for the way in which you have received this toast, and I feel that in replying, I usury to some extent the position of my old friend, Mr. Seymour, who has year by year responded to the toast. However, as he has not been able to reach England in time to be present, I have great pleasure in addressing you, and I cannot help feeling as I look round the room that we are old students in very trath. I notice that his is the 23rd annual dinner that has been held, and as I happened to be present at the very first and see several gentlemen here who were also with us then, I cannot help thinking that we are almost ancient now. (Laughter) It is a very curious thing that up to the year 1873 no dinners of this sort were held at all, and that prior to that there seems to have been no feativity. I have been talking to a gentleman near rue, and have been trying to find out the reason of this, but he does not seem to be able to explain it. He says, perhapathere were few students, and I am rather inclined to think they must have had festivities of their own, if they did not meet at dinners of this kind. Since 1873 these dinners have been continued regularly, and the people who have attended them seem to have enjoyed them in a sensible manner. It is with great pleasure that I note that the students of later times have been able to teach the older ones something, and I have no doubt that those who follow will be able to teach us a great deal moro. I expect in a few years' time we shall have all sorts of festivities at these annual meetings, of which, at the present time, we have no idea. The old students we knew year by year have gone all over the world, and wherever we go we meet students o

The toast was cordially given with musical honours. The Chairman, in reply, having returned thanks, proceeded: Before we part, I have to remind you that we must thank the committee and the honorary secretary, Mr. H. G. Graves—(cheers)—for this very pleasant evening. I hope we shall be able to retain their services on many future occasions, and I call upon you to drink heartily the health of Mr. Graves. (Cheers.)

Mr. Graves, responding, after the toast had been heartily honoured, said: Mr. Chairman and Gentlemen—I am afraid that I shall deserve your opprobrium by making a speech at such a late

honoured, said: Mr. Chairman and Gentlemen—I am afraid that I shall deserve your opprobrium by making a speech at such a late hour of the evening. I may be allowed to say, however, that I owe a great deal of gratitude to the various gentlemen who have aided me in bringing this large gathering together to-night. My friend, Mr. Bennett Brough, has always stood at my elbow to aid me with advice and other means in his power towards bringing this gathering together, and then Professors Le Neve Foster, Roberts-Austen, and Messre. Seymour, Hughes, and Chambers, with the other members of the committee, have beloed me to a very considerable extent. Besides this I have Hughes, and Chambers, with the other members of the committee, have belped me to a very considerable extent. Besides this, I have to thank the Chairman for the very kind aid he has given me. I ought also to thank The Mining Journal for the very full reports they have given of the proceedings at our dinners. (Cheers.) These reports have always been verbatim, and they will preserve to the futures full account of all that we have done here to night, of the people that are present, and everything, in fact, connected with us. They have also done us good service in keeping the fact that this dinner was going to be held before the public. Of course, it is simply impossible to keep traces of all those connected with the school. The mining engineer comes and goes, and he never leaves any address behind him. I have received letters of regret from Professor Thorpe, Captain Abney, Mr. George Cawston, and Professor Huntingdon. Up to the very last moment they had intended to be here, but to their great regret they were kept from coming. Professor Thorpe, Captain Abney, Mr. George Cawston, and Professor Huntingdon. Up to the very last moment they had intended to be here, but to their great regret they were kept from coming. Besides that, I have had letters of regret at inability to be present from Lord Grey; Lord Playfair; Sir Frederick Abel, President of the Iron and Steel Institute; Sir David Dale, Bart.; Sir Benjamin Baker, President Civil Engineers; Professor Milne; Sir Archibald Geikie; Captain Francis, of Halkyn; and Mr. W. Thomas, of Camborne. I especially regret the absence of Captain Abney, owing to the interest he has always taken in the Boyal School of Mines. I have again to thank you for your kind acknowledgment of what I have done in organising this dinner. I am reminded that when the alchemists used to astonish people by their feats they used to transmute metals—after dinner. (Laughter.) Well, I think I have gained your approbation—after dinner. At the same time I may say I feel assured that when I look at your approbation by the cold light of to-morrow morning it will be found to bear the test. (Cheers.)

ncluded the toast list, and the guests separated consider-

ably before midnight,

THE demand for the new issue of British Battles on Land and Sea in penny weekly numbers has been very large. 125,000 of the first number have already been prepared, and it seems highly probable that double this number may be in circulation in a few days' time. The mighty wave of patriotic sentiment which is passing over the land is no doubt accountable for this special sale, combined with the fact that nowhere else can such a body of illustrated information respecting the exploits of the army and navy be found, whilst the price of the present issue is in the highest degree popular. A similar success seems likely to attend the popular edition of Cassell's Illustrated History of England, the first weekly part of which made its appearance on the 29th inst. Every care has been taken to prepare for the immense orders which are flowing in from the trade. THE demand for the new issue of British Battles on Land and Sec

NEWS of Nansen and the Fram is confidently expected during this year by the Danish explorer's friends, and preparations for this summer's Swedish Balloon Expedition to the Pole under Herr Andrée are already far advanced. Under these circumstances the editor of Cassell's Magazine has been taking the opinion of experts in travel and exploration upon this "Race for the Pole," and in his February number will be found letters from Mr. H. M. Stanley, M.P., Sir Martin Conway, the President of the Royal Geographical Society, Admiral Sir Leopold M'Clintock, K.C.B., and Mr. Henry Coxwell, in answer to the question, "Can Nansen or Andrée reach the Pole?"

EXPLOITING BURMA GOLD REEFS.—A Mandalay local paper says that Mr. Ashur, of gold mining fame, is on his way out to exploit the reefs containing the precious metal in North Burma, and that he has secured sobstantial backers. It has long been known in Calcutta, a local paper says, that the "nitrate king"—Colonel North—supports Mr. Ashur, and in a manner that he could not hope for from investors in India.

COAL IN ALSACE.—It is reported that an important deposit of coal has been discovered at Bonhomme, in Alsace, and that a company is in course of formation in Strassburg to work the same.

REVIEW.

Gold Mining, with Hints to Investors. By Richard J. Middle-

Gold Mining, with Hints to Investors. By Richard J. Middleton, Broad-street House, E.C. Price 1s.

Seeing that the gold mining industry is occupying a position which it never occupied before, and likewise that the public are more and more attracted by it for investment and speculative purposes, this little book has made a timely appearance. There are thousands of investors and shareholders all over the world who are only too anxious to invest their all in gold mining, and who look forward to receiving a good interest upon their outlay, who know absolutely nothing of the industry in which they have embarked their capital and their savings. From attending the meetings of the companies in which they are interested, or from reading the reports of the proceedings are interested, or from reading the reports of the proceedings in the mining or financial papers, they are able to gather some idea of what mining is, but it is extremely vague. The author of this book, therefore, has supplied a want which is keenly felt, this book, therefore, has supplied a want which is keenly felt, and it goes without saying that we can cordially recommend it. One cannot expect an ordinary layman to toil through a technical treatise on gold mining, for he will be but little benefitted by his labour. Mr. Middleton has written a book which, though unpretentious, possesses a certain value for the layman, who, after a perusal of it, can gain a very excellent idea of what gold mining is. As the author says in his preface:—
"This little work is intended to supply nothing more pretentious than a slight sketch of the important in lustry of gold mining. It would, of course, be obviously outside the scope of this intention to enter fully into details, and, in fact, any such purpose would necessitate obviously outside the scope of this intention to enter fully into detsils, and, in fact, any such purpose would necessitate the preparation of an elaborate treatise. To this end the writer has confined himself to giving a brief and simple description of the salient features of the industry, and has, therefore, endeavoured, as far as possible, to avoid the use of technicalities likely to confuse the reader." It is written in a most clear and forcible style, which is not the least of its recommendations. Chapter 3 is devoted to throwing out a few hints to investors, which meet with our approbation, and gives advice which we ourselves have frequently given from time to time. "There are," the author remarks, "various points to which an intending speculator should direct his attention before investing in a gold mining company. It may not be out of place to briefly recapitulate a few of these:—

(1) The character of the expert's or mining engineer's report

The character of the expert's or mining engineer's report

(2) The capital proposed to be raised to work the mine.
(3) The locality where the mine is situated, what labour obtainable, and climatic conditions.

obtainable, and climatic conditions.

(4) Water supply and facilities for transport.

(5) Proposed management and directorate."

We quite agree with him that if only sound judgment were exercised, the mining industry offers a magnificent field for investment, but, unfortunately, to a too frequent extent this judgment is lacking. As the author says:—"Mining must be to some extent speculative in character, but given the essentials of a read preparaty honest direction; sufficient but not excess. of a good property, honest direction, sufficient, but not excessive capital, and skilful management, then it assuredly offer sive capital, and skilful management, then it assuredly offers stronger inducements to the investing public than are held out to them in the alluringly-worded prospectuses of nine-tenths of the commercial companies of the day. In mining, as in other things, man cannot command success; but in the purely speculative part of it, he can, by careful judgment and selection, do much to minimise the risk of failure. There are fortunes still to be made in gold mining investments, but only by those who exercise ordinary prudence in the direction of their business transactions."

FOREIGN MINING MARKETS, COLORADO.

COLORADO SPRINGS, COLO., JANUARY 11.

THE market during the past week has been slightly reactionary and elistinctly erratic. It opened phenomenally strong and closed with many svidences of weakness, but recovered somewhat at the close. There were no noticeable declines in any stock, slibough the entire list shows a failing off in price, which is the natural consequence of a sharp advance without any cause. Besides, it is impossible for advances of this character to be maintained or become permanent unless a readjustment takes place. That is, they must remain long enough at the increased quotations for the stocks that have been purchased at low figures to become merged into high prices, and this can only be accomplished by activity at the increased figures. There are numerous companies springing up, many of which are questionable, but the majority have intrinsic value at the back of them. The facilities for gathering information are now such that a company without some capital, or possessing fair territory, cannot be disposed of or placed before the public without being subject to severe criticism. These new companies are so numerous that it is almost impossible for brokers to discriminate intelligently as to which is or which is not the most attractive purchase. In fact, most brokerage offices are practically information bureaus for the entire country. Of course, new mining exchanges, springing up throughout the United States, will it time have a good effect and create an outer which could not be acquired in any other way. With this broadening of the market accompanied by the absorption of many stocks, the permanency of the mining stock business becomes more assured. It is my opinion that anyone who investe in such stocks as Isabelia, Oripple Creek Consolidated, Pharmacist, Work, Specimen or Union, and others of that order, cannot avoid good profits if they utilise a little patience; but for distinctly specialistive propositions I should be instinced to suggest the investigation of later Mational, Royal Age, Bo COLORADO SPRINGS, COLO., JANUARY 11.

VIVIAN'S BORING AND EXPLORATION COMPANY (LIMITED), Whitehaven, who put down a boring 500 yards deep for Mr. F. A. Newdigate, M.P., of Weston Hall, Nuneaton, at Wales Wood, Bedworth, Warwickshire, in nine months, and proved some good seams of coal, are now engaged in boring an artesian well at Weston Hall to supply Mr. Newdigate's mansion with water, and have obtained a good supply at about 300 feet from the surface. This company is well known by the large amount of exploratious carried out by them during the last 25 years, in all parts of the country, and the great development of the salt industry they helped to make in the Middlesh ough district by discovering salt, and putting down over 50 brine wells.

"CASSELL'S HISTORY OF ENGLAND."—Mesers. Cassell and Com under a great obligation to them by their numerous and multi-plying publications, in weekly or monthly parts, of well-known and famous works. As a consequence of this the name of the firm is becoming a household word, and most of their publica-tions may be seen in nearly every home. They have that the tions may be seen in nearly every home. They have just commenced to publish, in weekly parts, price 6d., their illustrated History of England, a work which we are confident, will meet with universal favour. It goes without saying that we heartily

MEETINGS OF MINING COMPANIES.

KATHLEEN GOLD MINE, LIMITED.

R. HENRY WILSON (the Chairman), presided over the first ordinary general meeting of this company on Monday, at Winchester House.

The SECRETARY (Mr. W J. Lavington) having read the notice

The SECRETARY (Mr. W J. Lavington) having read the notice calling the meeting, and: Gentlemen—Before proceeding o make any remarks in connection with the business on which we have met, I deem it right to offer some apology or to give some explanation, to those gentlemen associated with the Stock Erchange for having convened the meeting on a day that is somewhat inconvenient to them. However, we have a great deal of business to transact from day to day, principally in connection with the necessity of complying with the new Mining Act which has been enrolled on the statute book of New Zealand. Statutory meetings, such as we hold to-day, are becoming common-place functions. They occur so frequently that apparently, judging from the small attendance usually, but which in this case, I am happy to say, is the reverse, but little interest attaches to them. However, it is necessary that they should be held in order to comply with that Act of Parliament which provides that all companies working under the Act of Limited Liability should hold a meeting of shareholders within a period of four months from the date of incorporation. We, by holding this meeting, comply with the provision of that Act. This company met with a very favourable reception from the public. It was daly incorporated. Your chares were over-applied for, and the allotment took place on October 9. Our first daty then was to communicate with those upon whom the responsibility of local management devolves, advising them of the success of the issue, and also instructing them to make a careful survey, or to take out their sections, and to do all that was necessary for the purpose of formulating their programme. That, you will readily understand, took some time. Steps were immediately taken to comply with our suggestion. The programme was creating bold enough, without being in any way pretentious. After receiving mature consideration, and after consultation with several men who are familiar with the property, and whose opinions bear the hall-mark of experience is judging his competence in every department of the duties that devolve upon him. Captain Hodge is already familiar, I suppose, is with every square foot of this mining country. On him the responsibility of local management will devolve. I desire to emphasise this particularly, because seeing his connection with that marvellously rich mine, the Hauraki, in which we are also interested, it is evident he must have a favourable notion of this property, or otherwise he would not have associated himself with it. You have acquired a property formerly called Lindsay's Paddock, of something like 50 acres, said to be situate in the very heart of the auriferous belt. It is surrounded by many progressive mines with which you are already familiar. I suppose it is within a stone's throw from a sling of the eastern border of the Hauraki Gold Mining Company. Nothing whatever intervenes. It adjoins several rich mines also on its eastern side, and, in point of fact, what those other mines are successful in securing I have no doubt we also will secure. In the programme Captain Hodge has determined upon, I am happy to tell you the sinking of the shaft is the most important item. In his telegram on January 10 he says—"I will commence sinking in 10 days," so that, at the present moment, I expect the process of sinking is proceeding. All arrangements have been made as to the supply of the necessary machinery. Some of it will by this time, in all probability, be on the ground. He is determined to press on vigorously the development of your property, and at any time during the progress of sinking the shaft you may expect important results. I desire carefully to guard myself on this, as I do on all other occasions, from falling into the gratuitous folly of prediction, but I think I may fairly predict that during the process of sinking this shaft, which is exactly in a line due east, and only a few hundred feet from the main shaft of the Hauraki you may expect some important results, especially seeing that the strike of the Goloonda re may mention that a favourable circumstance connected with it that when Captain Hodge took his first survey of the property, at communicated the result to us, be then contemplated the necessicommunicated the result to us, be then contemplated the necessity of sinking two shafts. On a second survey, with a view to making himself perfectly familiar with the character of the reefs in all the surrounding mines, I am pleased to inform you be altered his original opinion, and determined only to sink one shaft on the eastern line from the Hauraki. That may not appear of much importance, but it does so appear to us, inasmuch as it has a tendency to reduce the expenditure for the necessary machinery alone by something liks one-half. There are no resolutions to move, and I shall be most happy to answer any questions you may put to the best of be most happy to answer any questions you may put to the best of my ability. (Cheers.) SHAREHOLDER: How long will it take to reach this depth of

The CHAIRMAN: That will depend upon a variety of circumstances, but the manager's own statement is that the 200 feet will be completed within a period of 12 months. He is very careful, and seldom over estimates. I now declare this meeting closed.

extraordinary general meeting followed, for the purpose of sering and, if thought fit, passing resolutions altering the considering and, if th Articles of Association.

Mr. LAVINGTON having read the notice convening the meeting,
Mr. Wilsow said: You have heard the resolutions read, the chief
purport of which is to provide for the opening of a local registry.
Some speople have been slightly alarmed in consequence of the

necessity which has arisen for this meeting and the complications of this Act of Parliament. There is not the slightest necessity for alarm, for this new Act will in no way interfere with the rights or privileges of English shareholders. The Government of New Zealand are too sensible of the fact that 90 per cent. of their mines have remained in a derelict state for something like a quarter of a century, and that their revisitoation has only taken place in consequence of the introduction of British capital. Therefore, you may be well assured that the New Zealand Government—up to the present, at least—do not contemplate any Act which will interfere with the rights or privileges of those who provide money for the industry of gold mining on the North Island of New Zealand. If they attempted to do so, I should unhesitatingly head a deputation to the representatives of New Zealand, and point out to them that it is not desirable that they should take any steps to kill the goose that lays the golden eggs. (Cheers.) I do not apprehend there will be any difficulty as regards the application of this amended Act. Our Articles of Arsociation have been carefully compared with the obligations now imposed upon us, and have been so adapted as to comply with all the provisions of this Act. I will put the resolutions en bloc. (Cheers.)

Mr. CECIL HARTEIGER (director): I second the motion, the object of which Mr. Wilson has so clearly explained. The opening of a register in the colony will have the effect of increasing the value of your shares here, because shares removed from this market to the Aackland market will not come back. As an instance, I would quote the fact that when Hauraki shares were being dealt in 17s. here, they were being dealt in in Auckland at 30s., and now.

would quote the fact that when Hauraki shares were being dealt in would quote the fact that when Harrai sames were being dealt at 17s. here, they were being dealt in in Auckland at 30s., and now, while only 8s. here, they are changing hands in the colony at 16s.

The CHAIRMAN then put the motion, which was unanimously

vote of thanks to the Chairman and directors was accorded and the meeting closed.

TURON GOLD MINES, LIMITED.

The first ordinary general (statutory) meeting of the shareholders in the Turon Gold Mines (Limited) was held on Thursday, at Winchester House, Old Broad-streer, under the presidency of Brigadier. Surgeon Lieut.-Colonel BENSLEY (the Chairman of the company).

The SECRETARY (Mr. George Davies) read the notice convening

the tier House, Old Broad-street, under the presidency of BrigadierSurgeon Lieut.-Colonel Brabley (the Chairman of the company).

The Scentram (Mr. George Davies) read the notice convening
the meeting.

The Chairman said: Gentlemen—Your directors meet you today at the first (or statutory) meeting of the company, which the
Act requires us to hold within four months of registration. We
have really no formal report, or account, to lay on the table, but
we shall place matters of interest before you which we hope will
convey assurance to yoe, as they have done to us, of the
value of the property you have purchased. The company was
registered on October 2nd last, and under the laws that
prevail in New South Wales the title deeds were transferred on November 11th last to a local trustee at Sydney, who
holds them on our bahalf. Although the time that has elapsed
since the property came into our hands has been short, nevertheless, your directors have acquired sufficient information to assist
tham in laying down a line of policy for the goldance of your mine
manager, which they think will not only secure speedy and substantial results, but which will come well within the compass of the
limited working capital at our command, but regarding this I shall
speak later on. I prefer, in the first instance, to give you a short
history of your property, as gashward from the prospectos, which I
hops you all remember, and the reports that have come to us since
the company came into our hands. Your property consists of several
lesses, aggregating in all about 74 scree, situated in the heart of the
famous Teron gold fields, which in early days and in the first instance supported a population of about 60,000 alluvial diggers.
These were followed by working miners with small holdings, who,
being destitute of capital, worked their lesses in a very primitive
strie, abandoning one shaft and sinking another, when an influx of
water, always obtainable at shallow depths, proved too much for their
buckets to cope with. A book that south mine, No. 2 south mine, No. 3 south mine, No. 4 Mansfield's yea't, and No. 5 Salisbury (Spring Creek). I propose referring to the salient points in each one. No. 1 south mine contains lease 31 and part of lease 25. Here there is an old shaft on the Carnie ye iv, and No. 5 Salisbery (Spring trees).

the salient points in each one. No. 1 south mine contains lease of an 1 part of lease 25. Here there is an old shaft on the Carnier red. The stone is about 5 feet thick, and of most promising appearance. No. 2 south mine contains the remaining portion of lease 25; here run Carnie's and Williams' reefs. Shafts have been suck on both to an average depth of about 30 feet. In Williams' the reef is 2½ feet thick, shows gold freely, and is expected to yield 2 to 3 conce stone. There is also another working here on a large reef 13 feet thick, from which a portion of stone had been taken out and cra-hed in former times. The relative position of this reef with regard to the others has not yet been determined. Then we come to a working at Mungen's engine shaft. This shaft is down 160 feet. Here the reef is 5 feet thick, and shows coarse gold freely throughout. There is also another reef in this section about 18 inches wide. The main shaft is down 114 feet, and is retimbered in a substantial mainer. The former proprietor obtained highly payable stone from the first 50 feet of this shaft; the second 50 feet was not quite so good, but the last few feet show a decided improvement, and indicate an appreach to a rich shoot.—No. 3 south mine, lease 59. Here the same reef as last described has been worked. The main shaft is now down 160 feet. It is doubtful whether this reef has any connection with the attention for the first state. sha't is now down 160 feet. It is doubtful whether this reef has any connection with the others—in fact, it is regarded as a distinct reef, which reakes the fourth one as far as we know. Some rich stone was obtained from it by former owners. This and the preceding shaft have been retimbered and deepened by our manager, who says that this work has practically resulted in the opening up of an additional mine from which a large tonnage of stone could soon be made available,—No. 4 Mansfield's gally, Lease 50: Here we come to a reef which, many years ago, was te-ted by several shallow holes, but the stone obtained did not encourage farther work. Recently some gold was discovered in the rubble on the footwall, which induced our manager to start prospecting by means of an underlie shaft 30 feet deep, with the result that the workings have revealed the presence of a rich mine in what was would get two 5., shares in the new company w 2. per share.—The resolutions were duly carried,

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hitherto deemed the poorest part of the estate. The gold is carried in a broken up reef averaging 18 inches. Some of the stone will yield several ounces to the ton, and it is estimated that the average of all the stone excavated will not be less than 2 ounces. The manager goes on to say that it is his intention to continue the development of this mine, as the material already raised and in sight awaiting haulage represents not less than 1000 lbs. He says this stone not only dollies well, but shows plenty of gold, both fine and coarse, as it lies in a heap.—No. 5 Salisbury (Spring Creek). In the Spring Creek reef work was in former days carried on extensively, both in extent of surface and in depth. The outcrop of the reef has been worked in a continuous manner for a length of nearly 1000 feet and in depth to about 390 feet. This reef the manager regards as distinct from the others previously mentioned. All the shafts here are full of water to about 70 feet from the surface, and, consequently, the manager has not been able to report as fully on them as on the other sections; but the evidence he has collected from those who last worked here goes to prove that rich stone going up to 4½ ounces was won at one time, and that at the bottom of some of the shafts there is still plenty of stone awaiting stoping, which will yield 2 ounces on to say that it is his intention to continue the development of this won at one time, and that at the bottom of some of the shafts there is still plenty of stone awaiting stoping, which will yield 2 ounces to the ton. (Applause.) I am afraid, Gentlemen, I have bored you with long and dry details regarding the several sections of the mine; but if the details are long and dry, they are at least giltedged. I am most anxious that you should be convinced, as I and my colleagues already are, that you have acquired a property of great extent and great richness. (Hear, hear.) Even the very last cable we received from the other side, dated the 21st instant, says: cable we received from the other side, dated the 21st instant, says:

"We are opening up the ore body in the 150 feet level in No. 2 south mine, and are raising rich ore from Mansfield's gully. The future prosperity of the mine is quite certain." (Applause.) Now I come to a most important matter, and one which I expect most of you have been awaiting information about, and that is the policy your directors have decided upon for the development of the property. In a property of great dimensions, such as this is, and with a cash working capital that is not over large, this is no easy question for decision. Your directors have taken advice from the mine manager, who says that if sufficient capital is available he would strongly recommend the simultaneous over large, this is no easy question for decision. Your directors have taken advice from the mine manager, who says that if sufficient capital is available he would strongly recommend the simultaneous working of the whole line of five sections, measuring about \(\frac{1}{2} \) mile in length, having a central site for motor power and reduction plant where water was always available. This is a proposition that is at once sound in principle and particularly fascinating to those who understand the working of mines on an up to date system. There can be no question whatever that to get the best and most substantial results, the most desirable scheme is to work all five sections simultaneously, with a central site for all operations. From this point would diverge the power obtained from compressed air by high pressure for the various purposes of hauling, pumping, and rock drilling, and to this point would converge the stone conveyed on tramilines for battery treatment. It is a scientific method, and unquestionably an economical one; in fact, the manager states that in the matter of crushing alone, by doing it in this way and by adding more heads of stamps to the existing battery, a very considerable saving in cost will be effected. This method of development, while requiring a considerable outlay for working, will also require a large outlay for machinery, such as a direct-acting air compressing engine with boilers complete, rock drills, air maine, both for surface and underground, water mains, tram lines, trucks, and other accessories. The directors, while accepting this scheme, and commending it to you, have decided, in view of the limited cash working capital in hand, to commence in the first instance with only a portion of the plan, embracing four out of the five sections of the mine—that is to say, No. 1 south, No. 2 south, No. 3 south, and No. 4 Manefield's gally; and considering that in these stone is available at shallower depths than in No. 5, and that the central site No. 4 Manefield's gully; and considering that in these stone is available at shallower depths than in No. 5, and that the central site for operations lies near No. 1 south mine, it becomes desirable that for operations lies near No. 1 south mine, it becomes desirable that the expense of working the section that lies to the extreme northwest, or opposite end, should be avoided. As we get returns from these four sections, and have more capital available, we shall proceed with the development of No. 5 Salisbury (Spring creek). The directors have already ordered the machinery necessary for working the sections which they have selected, and they will await results which they confidently feel will not be disappointing. But now, Gentlemen, I come to a matter which, perhap, may cause you a trilling disappointment—I hope only a passing disappointment, Our prospectus told you that we had a 10 stamp battery, and that crushing would commence almost immediately. This certainly was our intention, but when our mine manager came to prospect the property, with the view to sending as a detailed report, he found that a property of such magnitude and such richness deserved a wider and more scientific system of development than the narrow, unsystematic, and primitive method development than the narrow, unsystematic, and primitive method that existed. He, therefore, suggested to us the line of operations which I have already mentioned to you, and which has met with which I have already mentioned to you, and which has her with our apployal; and as this change necessitated the selection of another battery with the view to re-erecting it on the new site, on larger and more solid foundations, that will admit of additional stampers and other improvements, and he hopes to be ready for work some time in April next. I hope, ladies and gentlemen, that this waiting, which is not by any means pleasant, will not tire out your patience. I can only affirm that if you will but exercise that noble quality on this occasion you will, at no distant date, be rewarded with better and more profitable results than you would get from immediate crushings. I have nothing more to say, but to thank you for the patient indulgence with which you have listened to me, and I will conclude by again assuring you that you have an excellent property—a property that possesses all the paramount qualities that go towards making a good mine—that is to say, it has several well-proved reefs; yes, Ludies and Gentlemen, reefs; that have run the gauntlet of proof for over 25 years, and still have plenty of payable stone; it has plenty of fresh water, plenty of cheap timber, and plenty of cheap labour. With regard to the latter, I may say that in New South Wales a miner's wages are only about. our approval; and as this change necessitated the selection of another timber, and plenty of cheap labour. With regard to the latter, I may say that in New South Wales a miner's wages are only about 65 per cent. of those paid in the more fashionable districts of Western Au-tralia. I hope, gentlemen, when we meet again, I shall be able, with the hearty co-operation of my colleaguer, who are sealous and practical men or business, to give you an account of our stewardship that will convey conviction to you in the shape of a substantial dividend. a substantial dividend.

Mr. JONES said the shareholders could hardly fail to be satisfied mit. Jones and the shareholders could hardly lail to be satisfied with the statement which the Chairman had made. Before embarking his capital in the company he had made a thorough examination of its position, and the occulosions he then arrived at had since been corroborated. The mine appeared to be § of a mile in length, and on one part of them the reef had been proved to a depth of 300 feet, and was in some places 18 feet wide. He looked forward to the time when they might have a very large number of

forward to the time when they might have a very large number of stamps working, and be in the receipt of large dividends.

On the motion of Mr. T. H. NORTH, seconded by Mr. JONES, a hearty vote of thanks was given to the Chairman and directors, and

THE BLACK SWAN GOLD MINE (LIMITED). An extraordinary general meeting of shareholders in the Black Swan Gold Mine (Limited) was held on Monday, at the offices of the company, 2, East India-avenue, for the purpose of considering the advisability of reconstruction.—Mr. E. Chapman, who presided, in recoving resolutions ambediags as the most reconstruction. in moving resolutions embodying a scheme of reconstruction, explained that the necessity for this step had arisen owing to so large a number of shareholders having failed to pay their calls. The total of capital actually subscribed had amounted to £7251, whereas if all the shareholders had paid up their calls the amount would have been £17,000. At present the company had about £150 at the bank, while there were liabilities considerably in excess of this. There was every prospect, they considered, of the mine turning out to be a good one, but before they sunk much money in it they intended to have a careful report made as to its value. Under the reconstruction scheme the capital would be reduced from £85,000 to £40,000 and for each £1 shows in the old company shareholders. £40,000, and for each £1 share in the old company, shareholders

with a liability of

THE WORLD'S TREASURE, LIMITED.

The first general (or statutory) meeting of shareholders of the Yorld's Treasure (Limited) was held on Monday, at the Cannon-treet Hotel, Mr. E. S. REVETT (the Chairman of the company) pre-World's Tr

The SECRETARY (Mr. C. E. Taylor) read the notice calling the

meeting.

The CHAIRMAN said: Ladies and Gentlemen—As you are aware, this meeting is called to comply with the requirements of the law, which provides that the first meeting of a public company must be held within four months of the registration of that company. You will, of course, understand that in so short a time it has hardly been possible for your directors to have very much to report as to the development of the property. We have been able to complete the postible for your directors to have very much to report as to the development of the property. We have been able to complete the transfer, and to make the necessary arrangements for managers in Australia—which I need not tell you is most important, to arrange with our consulting engineers, and to put everything in order for the immediate and active development of your property. Your company went to allotment on October 9 last, the amount a Lied for being £70,000, out of which £30,000 has been paid to the vendors, and the remaining £40,000 working capital is practically intact. As I said previously, the transfer of the property of the company had been completed, and we have taken possession through our agents in Western Australia, who are now on the property, and arranging for its development. We have also made what we consider a most satisfactory arrangement with Messra. Bewick, Moreing, and Co.—whom, I am sure, you all know at least by reputation—to act as our consulting engineers, and the directors will at all times be able to have the benefit of their advice. The supervision, development, and management of the mine will be carried on in Western Australia by Messra. Alexander Mattheson and Co., whom you will also know by name as being one of the most prominent firms, and one which commands, from their long experience and high reputation, the very greatest respect in the colony. Owing, in the first place, to the fact that Christmas exemptions tave intervened at the mines, a period out there during which it is almost impossible to get work done, and also to the length of time which correspondence with Western Australia occupies, we have not as yet received the first report from our managers at the mine, but are expecting it every day, and I need not assure you that all reports will be dely and regularly Western Australia occupies, we have not as yet received the first report from our managers at the mine, but are expecting it every day, and I need not assure you that all reports will be duly and regularly published in the Press for your information. I now come to the property itself. You will see by the reports which were published in the prospectus that there is indisputable evidence that the Wealth of Nations reef runs through the whole length of our property. We have also their evidence that where the reef has been opened on your property. have also their evidence that where the reef has been opened on your property, there gold is largely shown, and we have the strongest faith that the property is undoubtedly one of great value. You will remember that when the prospectus was issued it was stated that the property immediately adjoined the Wealth of Nations. Whether this was technically a mis-statement or not I am not in a position to say without reopening an old controversy, but the fact remains that this property does immediately adjoin Dunn's Wealth of Nations leaves, of which I believe the Wealth of Nations Company (Limited) acquired 24 acres, leaving two blocks, aggregating 12 acres, lying between these 24 acres and the World's Treasure (Limited). These 12 acres, I am informed, have since been promoted as the Wealth 12 acres, I am informed, have since been promoted as the Wealth of Nations Extension, and I am also informed that the shares of the company stand at a premium, which goes to show that the people who know the value of this reef believe that it continues to be as good up to our boundary as in the property of the Wealth of Nations itself. This view is practically endorsed by the Chairman of the Wealth of Nations (Limited) who, at the statutory meeting of that company held on November 1, said: "Why the World's Treasure people company held of November 1, said: Why the World's reason paper or certain papers should have made a tempest in a teapot over the question is not apparent to us, inasmuch as the mere fact the World's Treasure property not being immediately contiguous the World's Treasure property not being immediately contiguous ours does not in any way destroy its intrinsic value, and, matter of fact, we are informed that the property is on the m line of the Wealth of Nations reef, and may on development pro equally valuable." We feel sure, gentlemen, that it will pro equally valuable, and that when we have the pleasure of meeting you here again the results will show you that it is so. I need not say that, on account of the controversy which arose, your directors had a year apprious and trying time, and in everything they side. say that, on account or the controversy which arose, your directors had a very anxious and trying time, and in everything they did they took the precaution of obtaining the advice of the most competent and eminent solicitors and counsel in company matters it was possible to obtain. It only remains for me to thank you for-your kind attention, and to say that, should any share-holder wish to ask any questions, and it is in my power to answer them, I shall be pleased to do so.

Mr. Brown: As no shareholder has offered any remark, I beg to precess a cardial vote of thanks to the Chairman. We all known

propose a cordial vote of thanks to the Chairman. We all know the company is a good one, and I, as a shareholder, am perfectly satisfied with everything the directors have done. I have perfect

confidence in the concern. (Applause,)

Mr. Skelton: I have much pleasure in seconding that.

The motion was then put to the meeting and carried by

acclamation.

The CHAIRMAN having acknowledged the vote, the proceedings

GOLD FIELDS OF MYSORE, LIMITED.

The ninth ordinary general meeting of shareholders in the Gold ields of Mysore (Limited) was held on Tuesday, at the Cannon-reet Hotel, Lord RIBBLESDALE (the Chairman) presiding.

The SECRETARY (Mr. John Garland) read the notice convening

the meeting.

the meeting.

The CHAIRMAN said: Gentlemen—I think the accounts which we have had to present to you this year are necessarily of rather a complicated character. The company's assets consist mainly of shares in various companier, and of a certain number of fully paid shares in the Oriental Gold Mining Company. The shares in the various companies amount to about £50,000, and the shares in the Oriental Company to £55,000 odd. That makes a total of £105,000, liable to calls of amount to about £50,000, and the shares in the Oriental Company to £55,000 odd. That makes a total of £10,5000, liable to calls of £10,800. In addition to this we have uncalled capital on the 55,000 shares created by the new issue of 10s. per share, but some people, with the view of getting their shares fully paid up, have anticipated calls, and consequently the total sum derivable from uncalled capital amounts to £19,636. If you turn to the income and expenditure account, you will see that that is all plain sailing; it is merely the £ s. d. expenditure of every-day life. There is a gross profit shown of nearly £42,000 to August 31, 1895, and that profit is snown of nearly £2,000 to August 31, 1895, and that profit is mainly due to a sale of land to the Oriental Company for 62,500 fully-paid shares of £1 in that company. Out of that profit the directors have decided to pay a dividend in fully-paid shares of the Oriental Company equivalent to 10 per cent. Turning to the profit and loss account, at the date of the last balance-sheet we held 2223 Mysore shares, 2000 Ooregum, 100,000 Kempinkote, partly paid, which we had subscribed for at the formation of the company and 20,000 fully raid. On the sale of the 2223 Mysore shares. pany, and 30,000 fully paid. On the sale of the 2223 Mysore shares a loss appears against the company of £6548. That must not be supposed to be a loss which the strong box of the company has to supposed to be a loss which the strong box of the company has to face; it is a loss between the value of the shares. Those shares were put down some years ago at something like £6 per share. When we sold them we were only able to do so at the present price, and that is how that loss arose. As against that you have the small profit of £1200 on the sale of the Ooregum share, and a still smaller profit of £50 on Kempinkote shares. I now come to the most unpleasant part of this particular section of the accounts. Out of the reconstruction of the South-Ea.t Mysore, which has now become the Yerrakonda Company, and out of the reconstruction of the Nine Reefs a loss has resulted to

pany of £8048. Perhaps I had better explain how that The 50,000 fully-paid shares of 4s, each in the South-East Company were valued in the 1894 balance-sheet at par arises. The 50,000 fully-paid shares of 4s, each in the South-East Mysore Company were valued in the 1894 balance-sheet at par-namely, £10,000. In the reconstructed company, the 50,000 shares which the company subscribed for so as to retain their interest were credited with 2s, paid, leaving a liability of 2s, per share, or £5000. The Yerrakonda shares are taken in the balance-sheet at 3s, 6d. each—namely, 2s, credited and 1s, 6d. paid up; that is equal to £8750, which is the value of these shares as stated in our balance-sheet. In the case of the Nine Reef shares the company held at the date of the last balance-sheet, \$155 shares. \$115 shares were received by us with 10s, fully-paid; that is equal to £4057. In the reconstructed company an equal number of shares of 5s, each, credited with 2s, 6d, per share were subscribed for, so that there was an actual loss of 7s, 6d, per share, 25043. If you add that £3043 to the loss of 7s, 6d, per share, or £3043. If you add that £3043 to the loss of £5000 in the reconstruction of the South-East Mysore, and the small loss which areae out of 43 fully-paid Nine Reefs shares, you get the £8048 loss which has resulted from the sale of shares. The suspense account is a thing which really need give nobody any anxiety. It is an amount which is held for possible contingencies. The same amount appeared in the balance-sheet of 1894, and, as a matter of fact, it is undivided profits, which we made in that year. Then I come to the results of this year as against those of last year, We have done better. There is a green profit of £41,000 add. eared in the balance-sheet of 1894, and, as a matter of fact, it is isided profits, which we made in that year. Then I come to results of this year as against those of last year. We a done better. There is a gross profit of £41,000 odd, t shows an improvement of nearly £28,000 up to sat 31. Against that we have written off for depreciation sam of £14,596. I will now glance very briefly at what we think present position and prospects of the company. After we make distribution of Oriental shares we will still hold 36,965 fully. Oriental shares. We believe those shares have a great prospect. this distribution of Oriental shares we will said hold object any paid Oriental shares. We believe those shares have a great prospective salue. As you know, the Oriental Company's land abuts on the Tank Block, which is being worked by the Mysore West and the Mysore Wynaad companies. They have found a lode of very consore Wynasa companies. They have found a lode of very con-prable value, which, according to all experience of the Colar d, should dip into the Oriental Company's ground at no very con-stable depth—about 700 feet. Speaking of the south shaft on Golconda Block, the reserves have been increased by 3000 tons. be toleronical Block, the reserves have been increased by 3000 tons, bringing the total amount up to 12,000 tons. But we are on the thresho'd of what may prove a very important event for the Gold Fields of Mysore Company, This 12,000 tons of ore is refractory ore, and we have decided, after very full consideration, and after carefully ascertaining the results of the MacArthur-Forrest cyanide process, to send out a plant capable of treating 1500 tons are made and account in the second in a plant capable of treating 1500 tons to the macArthur-Forrest cyanide process, to send out a plant capable of treating 1500 tons to the macArthur-Forrest cyanide process, to send out a plant capable of treating 1500 tons to the macArthur-Forrest cyanide process, to send out a plant capable of treating 1500 tons cyanide process, to send out a plant capacito threating 1600 tous per month. If the sequel is as we have every reason to expect, that will be a very great thing for us. I feel certain the meeting will approve of the policy of the board in, at all events, making this trial in a proper and business-like manner. Captain Roberts thicks very well of the West Balaghat Block, and I believe that is a block which will attract attention at no very distant date. He also speaks very well of the Ajjapalli Block. I think the concluding sentence of our report, that we have every reason to consider that the prospects of the company are sound and good, is not a mere commonplace of a directors' report, and that, although perhaps the goose has lain a good many golden egge, she is still in good feather, and in the fature will give proof of her fertility. I have now only to move that the directors' report and accounts be adopted.

I CHARLES TENNANT seconded the motion Sir CHARLES TENNANT seconded the motion.

Mr. JOHN TAYLOR said: Gentlemen—The chief interest for shareholders of this company, so far as the mining works are concerned,
centres, of course, at the present time in the south shaft, of which
our Chairman has spoken. The preparation and equipment of this
shaft for the deeper sinking has, for various reasons, taken considerably longer than we anticipated; but I am glad to say this work is
now all completed, and that the sinking of the shaft will proceed
steadity. This is the more important from the favourable appearance which has been recently noticeable in the very bottom of the
shaft, and I do not think the extra time which has been occupied
will seem to you excessive when you come to consider what will seem to you excessive when you come to consider what has been done there. The shaft was not originally sunk with the object of making it into a main shaft of the mine; it was commenced, practically, as a trial shaft. A great deal of work has had, therefore, to be done to bring it into its present condition. A double skiproad has been laid from the surface to the bottom of the shaft to secure a rapid and economical banking of the shaft. double skiproad has been laid from the surface to the bottom of the shaft, to secure a rapid and economical hauling of the stuff; a ladder-way has been also put in throughout, and pipes to carry compressed air to the rock drills. In order to do this an enlargement of the shaft was necessary from the top down to the 470 feet level—the bottom level—in addition to which flats had to be cut, the shaft enlarged at different levels, and an excavation made at the bottom as a catchment for the water in case of any stoppage of the pumps. The 470 feet level has also had to be enlarged in order to make room for the rock drills. While this work underground was proceeding, a powerful hoisting engine, with pithead nd was proceeding, a powerful holsting engine, with pithead has been erected, and the shaft, we may satisfy ourselves, is in a condition, both at surface and underground, to deal ciently with the increased scale upon which the work soon is to carried on. The last report, dated September 21, says that the ft was 13 feet below the 470 feet level, and the lode there was 2½ feet wide, with an assay value of from 11 dwts. to 1 ounce 6 dwts.
The sinking there would be continued as rapidly as possible with a view to supplying the mill as soon as the cyanide plant is ready to view to supplying the mill as soon as the cyanide plant is ready to work, which will be in operation before very long. The 380 feet level at the south shaft was driven south 181 feet. Of this drivage, 130 feet was in a lode-from 8-inches to 4 feet wide, and assaying from 7 dwta, to a little over 14-ounces. The 380 feet north was driven 133 feet in a lode from 9 inches to 3 feet wide, and worth from 9 dwts. to 1½ ounces. The total distance that level has been driven north from the shaft is new 362 feet. It will be seen from the map accompanying the report that a rise has been commenced, and has gone up a considerable distance to meet the middle shaft. This will be a great advantage to us in the way of ventilation, and we shall bring the middle shaft, as well as the south shaft, into work. The 470 feet advantage to us in the way of ventilation, and we shall bring the middle shaft, as well as the south shaft, into work. The 470 feet level was driven south 177 feet. The lode has been from 1 foot to 4 feet wide, with an assay value of \(\frac{1}{2} \) ounce to 1 ounce 18 dwts. The 470 feet level north has been driven 159 feet. There the lode for most of the distance has been from 1 foot to 4 feet wide, with a value of from \(\frac{1}{2} \) ounce to 1\(\frac{1}{2} \) ounce. The lode at this deeper level is distinctly of more favourable promise throughout than in the 380 feet level above. I am going into these particulars at this point because I think it will naterally occur to you, as it has occurred to others, to ask what is likely to be the value of this quarts. Our Chalrman has spoken of quarts being raised from this mine. What are we likely to be paid for extracting it when we get the cyanide are we likely to be paid for extracting it when we get the cyanide plant to work? I do not like to prophecy before I know, because it is always dangerous to do so, but the indications from the assay value of the reef as we have passed through it in this level show that the quartz should contain rather over 1 ounce to the ton. We should, therefore, expect to extract 15 dwts. or 16 dwts. As far as we have gone, we have also before us the anticipation of an improvement gone, we have also before us the anticipation of an improvement apon that figure as the shaft goes deeper. There has been a discovery recently made, alluded to in the directors' report—a discovery of rich quarts absolutely in the bottom of the mine, in cutting the plat at the 470 feet level at the bottom of the south shaft. The quarts there averaged over 2 counces, and this speaks well for deeper sinking. Captain Roberts told us previously of thir, that in his opinion the 470 feet level was passing over richer ground than was seen in the level itself. From the south shaft a crossout was driven for the long distance of 399 feet, where it intersected the West Balaghat lode. Levels have been driven upon this West Balaghat lode a distance, in all, of something over 300 feet. The reef has been a strong one, averaging about 4 feet wide, but with a value of only from 2 dwts. to 3 dwts. The appearance of the lode, however, is such that Captain Roberts tells us he is of opinion that it will prove richer after more develop ment. Of course, we must recollect that on this West Balaghat ment. Of course, we must recollect that on this West Balaghat lode further to the north a most promising mine has been opened up. There are four shafts supk there, none of any considerable depth; and levels have been driven in all for nearly 1100 feet, proving this West Balaghat lode to be gold-bearing throughout the whole distance, and in many places

certainly payably so. Captain Rowe, our superintendent, only to quite recently, as the directors' report tells you, expressed a very high opinion of that portion of the West Balaghat Block. A certain amount of prospecting has been done upon the Road Block. North of one of the shafts, which is called the No. 3 shaft, a reef has been proved averaging 2 feet in width, and assaying from a counce to upwards of 1 ounce. Here, I think, we shall certainly require to do more prospecting work. Years ago a very reasonable opinion was entertained as to this block. Captain Plummer, notably, had a good opinion of it years ago, and it certainly must be deserving of a trial when we can undertake the work more vigorously. On the Ajjapalli Block we have a reef of the most masterly character—a reef which can be traced for miles, and by the limited amount of work done, as far, it is shown to be of gold-bearing value from 3 dwts, up to 16 dwts. Work has recently been resumed there by sinking the shaft, and Captain Roberts confidently thinks it is a place which presents very good prospects and should have a very extended trial. Now, to speak of the other properties—beyond the one which actually remains in our possession—in which the company holds shares, there is rather a long list of them. There are, I think, six companies mentioned in which we hold shares. The first one is the Oriental Gold Mining Company of Indis. It is now, of course, too soon to be able to say anything in regard to the result of the mining works on this block, but they are being actively pushed on. The principal shaft is already about 100 feet deep, and by the aid of the rock drill sinking will now proceed more rapidly. The prospect of opening up a good mine here on the reef which is being worked by the Myore West and the Myore Wynaad Companies, and by the Nundydroog Company further to the south, certainly appears excellent, and beyond that other well-known reefs pass through the ground which this company sold to the Oriental Company. The results of the operati and those who have charge of the works are hopeful that the reef may be found at a greater depth in a more concentrated form, and that the quariz will be richer. This will very soon be proved, as we have now reached a depth there of 500 feet. The next company, I think, is the Balaghat. There the mining works present no new features, but the cyanide process, in which we are all now so much interested, is about to be brought into operation there upon a large accumulation of tailings, and it is anticipated that from these funds will be provided for continuing the underground working, and that a very good revenue will be derived from the tailings. The discovery made at the Coromandel more than a year ago has been peristently followed up with the result of opening up a good extent of stoping ground, and the prospects of this mine may now certainly be called excellent. The general meeting of the company will be held very shortly, and the report, which will be sent out during the next few days to the several meeting of the company will be seld very shortly, and the report, which will be sent out during the next few days to the shareholders, will, I fancy, be considered by them to be very satisfactory. The new capital raised by the Nine Reefs Company is being applied to the sinking of the south shaft, with the object of devaluation the (themsion Performance Per being applied to the sinking of the south shaft, with the object of developing the Champion Reef, and also to deepening the shafts on the Oriental lode. Quite recently the water has been pumped out of the two shafts on that lode—called the main and Baynard's shafts—and it is anticipated that the operations here will lead to good results in the near future, for which we shall have to look to the cyanide process. The remaining company is the Yerrakonds, and here an important crosscut is being driven at a depth of 200 feet in Beresford's shaft to come under a run of ancient workings, which have been traced on the surface. This is an exploration which we are watching with much interest. There is one other matter to which I would like to refer. The directors' renort tells you of the retirement of Cantain Rowe The directors' report tells you of the retirement of Captain Rowe from the position of superintendent of our mine, consequent upon the increase in his duties as superintendent of the Champion Reef. the increase in his duties as superintendent or the Champion Reer. Captain William Roberts has been appointed to take his place, who has been in the service of my firm for a very long time—I believe for rather more than 30 years. He has had a large and varied experience of gold mining in different parts of the world, and you may feel assured that the control of our operations is in thoroughly capable hands. In conclusion, I may mention that several gentlemen have asked us for a plan of the Kolar gold fields. I find it is four years since such a plan was published, and the I find it is four years since such a plan was published, and the directors have decided that a new one shall be prepared and sent to any shareholder who desires to have it.

The motion for the adoption of the report and accounts was then

out and carried unanimously.

the motion of the CHAIRMAN, seconded by Sir CHARLES TEN NANT, a resolution was unanimously carried declaring a dividend of 2s, per share on the fully-paid shares, and of 1s. per share on the partly-paid shares, free of income tax.

Lord Ribblesdale and Sir Charles Tennant were re-elected directors, and the auditors, Messrs. Cooper Bros. and Co., were re-

vote of thanks to the Chairman and directors terminated the proceedings,

HANNAN'S PROPRIETARY DEVELOPMENT COMPANY,

The adjourned first general (or statutory) meeting of shareholder nnan's Proprietary Development Company (Limited) was needay, at the Cannon-street Hotel, the chair being occupied by the Marquis of Tweeddale.

The Secretary (Mr. H. Milner Willis) read the notice convening

The CHAIRMAN having briefly introduced Mr. Gray to the

meeting,
Mr. Ghay then read his statement which, after some preliminary
observations, proceeded:—The operating conditions in Western Australia are practically similar to those which exist in nearly all new
mining countries. In all of the new mining countries in which I have
been resident, similar difficulties have always had to be faced, requiring large expenditure of capital and energy to provide facilities and
establish communication. With the exception of the trouble in connection with our water sopply—a trouble, I am glad to say, which is
fait being removed—Western Australia possesses many natural advantages as a home of the gold mining industry, and will compare more
than favourably with many other portions of the globs whose aurithan favourably with many other portions of the globe whose ferous character has made them famous. Judging from inquiries which have been made of me since my rote to London, it does not appear to be generally k here how much has already been accomplished to the profitable production of gold in Western Aust In the Coolcardia gold fields we are not working my return here how much has already been accomplished towards the profitable production of gold in Western Australia. In the Coolgardie gold fields we are not working without some experience of the conditions which operate in a West Australian mining district. In one of the earliest gold fields of the colony, Southern Cross, the mines have been opened up, notwithstanding the many difficulties of operation in a new country, and several were brought into the dividend-paying list on an average yield of from 8 to 10 dwts. of gold per ton, and since then have continued regularly to pay dividends to their shareholders. What has been accomplished in one place, can, if necessary, he repeated at another. Much of the expenses of production in the past have been due to the difficulty and cost of transportation, but this difficulty is rapidly disappearing. Railways are now being built, and by the time I return to the colony I expect to find that the railway line has not only reached Coolgardie, but has been carried on to Hannan's. The Government of the colony has been subjected to many unjust strictures for not laving provided, subjected to many unjust strictures for not lawing provided, menths ago, greater facilities for transportation, as well as a permanent and sufficient supply of water. In my judgment, such adverse criticisms are altogether unfair, because it is not the part of a Government to proceed in advance of development, In the

y early days after their discovery, the gold fields had as many enemies as friends, some of our most able and experienced mining, engineers having, after a brief stay, practically condemned the whole of the district. As was only to be expected, these hostiff opinions influenced the Government in the colony equally with the capitalist in London, and it would, indeed, have been surprising if the Ministry had expended the money of the people until the value of the country's resources had been more fally established. The Government was cautious and careful, but so soon as all doubts were removed as to the richuess of the fields, they did not hesitate to spend the money for which they were responsible in providing facilities, in establishing post offices, erecting telegraph lines, the construction of dams and tanks, and latterly in building a railway which will connect the interior with the seaboard. The Government was not alone in the wise and cautions interest it has taken in the fields; the Ministers have been supported by the whole Parliament, most of the members of both Houses having visited the auriferous districts, and assured themselves by personal observation of their capabilities. The facts which were there brought under their notice appealed most convincingly to them, and when the Government came down to ask for an appropriation to build the railway from Coolgardie to Kalgoorile, the money was voted unanimously, without a single voice being raised in opposition to the project; and, Sir, I would commend this attitude of caution as worthy of imitation by private companies who expect to succeed in the development of their properties. They, too, must not anticipate the natural order of progress; they, too, must be guided by their responsible professional advisers, husbanding their resources, and obtaining the best possible results from their expenditure. I anticipate that the railway, which is to be completed by the latter part of May or the beginning of June, will make a vast resources, and obtaining the best possible results from their expendi-ture. I anticipate that the railway, which is to be completed by the latter part of May or the beginning of June, will make a vast difference in the result of our operations. We will be able to obtain much better results for the expenditure of our capital, the cost of all supplies will be reduced, and in the freight on machinery alone it should bring about a reduction of some £18 per ton. It will inall supplies will be reduced, and in the freight on machinery alone it should bring about a reduction of some £18 per ton. It will increase the supply of labour, causing a corresponding reduction in cost, it will add to the domestic convaniences, and altogether will effect such an improvement that I believe the facilities afforded will compare favourably with those which exist in any other new mining country. Now, I should like to tell you about the water supply of the West Australian gold fields. It has been the subject of very much discussion both privately and in the Press. In discussing the question, you must always bear this fact in mind—that it is very little more than two years since the Coolgardie gold fields were discovered. Up to that time very few people had penetrated toward the interior beyond Southern Orose, and at that time there was no population to be supplied. Now, there is a population of over 30,000 people, who have to be furnished with a supply not only sufficient to keep body and soul together, but for domestic and other purposes. The mining machinery already at work also requires a considerable quantity. It will thus be seen from these results that a great deal of work towards furnishing a supply of water must already have been accomplished. Private enterprise has largely contributed, but the Government has also expended heavy sums from the public purse for the purpose of keeping the roads open to traffic, and for supplying at the more important centres sufficient water for the purposes of living. Wells have been sunk, soaks drained, pumps erected, and bores put down. The Government is making still further efforts in this direction, and it is the declared intention of the Cabinet to have boring operations undertaken in order to thoroughly test the field, and at the same time grants of water the purposes of living. Wells have been suck, soaks drained, pumps erected, and bores put down. The Government is making still further efforts in this direction, and it is the declared intention of the Cabinet to have boring operations undertaken in order to thoroughly test the field, and at the same time grants of water rights and concessions have been made to private companies on the condition that they develop their holdings, and assist in the work of sapplying the mines and the rapidly increasing population with the requisite quantity of water. The Hannan's Proprietary Development Company has obtained from the Government one of these water rights, with a tenure of 21 years. In extent it is 5 square miles, and is situated in Hannan's Lake. I might mention that this lake is one of a continuous chain which extends right through the aurifercus belt of country, and they hold an abundant supply of water at a depth of from 12 to 20 feet. There seems to be a base of hard clay some 30 feet below the surface, thus forming a natural basis or subterranean reservoir. The Hannan's Proprietary Development Company propose to form a water and reduction company, which will develop this enonession by a series of trenches, dams, reservoirs, and a powerful pumping plant will be erected at the northern end, connected by a pipe line about 6 miles in length, to the highest point in the camp, from which the water will be distributed to many of the mines. A public crashing plant will be exceted at a central point in the camp—this, I can assure yas, is very much needed. That the supply of water can keep up with the demand, I have never had any doubt whatever. Another question, and perhaps the most important that can be asked in reference to Hannan's, is, do the lode formations live in depth? No better or more comprehensive answer can be given than the present condition of the lodes, which have, so far, been opened up. In the northern part of the camp we have the Hannan's Proprietary Development Company's mines, at the 125 feet level, and it shows unquestionable strength and high value. In the Lake View it has been opened at several points, practically proving it to be continuous the entire length of the property, some 3000 feet. In four of the western blocks of the Hannan's Proprietary Company it has also been out, each point revealing a uniform width and value. You will thus be able to obtain some idea of the length of these formations, and it is a well accepted geological rule that great strength in length gives great strength in depth. In fact, at no point of attack that I have seen do any of these lode formations show the slightest evidence of weakness in depth. In order that you may obtain a correct estimate of the extent of the property and the value of the developments already made, I have prepared a report which is now before you in circular form, and there you will find meating of the developments already made, I have prepared a report top of each one of our leases. the value of the developments already made, I have prepared a report which is now before you in circular form, and there you will find mention of each one of our leases, with general detail of the work which has been accomplished, and some reference to fature operations. You will see that altogether on the 27 leases some 32 shafts have been sunk, averaging about 100 feet in depth, and crosscuts, aggregating 500 feet in length, have also been made. The establishments of the camp, including offices, store rooms, and the usual accessory buildings, have been erected. The plan of work which I have mapped out is to drive at a mean level of 100 feet a crosscut from the extreme east to the extreme west of your property. When finished it will be about 6000 feet in length, and in its course ought to intersect all the well-known lodes of the camp. I believe, when it is completed, that it will be one of the longest crosscuts that has yet been made in the history of mining. It has to be remembered that, as a company, we are but a few months old, and notwithstanding the temporary difficulties of the past four months, due to what is known in the colony as the great Hannan's rash, when the population of the whole field seemed bent on concentrating itself in the Hannan's district, demoralising every source of supply, and rendering the working conditions of the whole camp extremely difficult, we have, I think, been able to make very satisfactory progress in

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Au to development work. I have been asked several times during the past week what I consider will be the earliest date on which we shall have an actual product from our mines. In mining, as in most other enterprises, it is well to be guided by the motto, "Little by little" cone thing at a time, and let that be done well. We have not hampered our work by departing from the systematic and methodical scheme of operations, which was mapped out in the initial stages of the company. First of all, having secured the property, we proceeded to thoroughly test its value, and by the work we have already done we have proved beyond any doubt the existence in our ground of six valuable ledes. Next, we have secured from the Government a water right, the largest granted to any one private corporation, and now we shall proceed to develop this right, which will secure to us an ample supply of water. We shall then have two of the great important factors for successful mining—gold and water. Then, when the railway has reached the field, bringing with it a reduction in all departments of expense, we shall be in a better position to obtain a plant of the size and character which our developments, and possibly also the experiments of our neighbours will prove most suitable for the successful and economical treatment of our ore. There, sir, we can make even more rapid progress with our operations. Secure in the interior of a Bitish colony, protected by all the safeguards of responsible Government, undisturbed by international boundary disputes, untrammelled by the harassing regulations and the extortiona'e demands of any foreign Administration, alien in language and traditions, we may peacefully proceed with the development of the great auriferous resources which are contained in the Hannan's district. Other countries may claim to have richer miner, and boast of better natural facilities for working them, but none can afford you greater security than does Western Australia, which will yet be one of the richest possessions of the British Emp

(Applause)
The Chairman mentioned that, besides the properties shown in the map accompanying the prospectus, the company had now three other mining properties, thus adding considerably to the value of

the undertaking.

Votes of thanks were given to Mr. Gray and the Chairman, and the proceedings terminated.

EXPLORERS' FINANCE COMPANY, LIMITED.

The first annual (statutory) general meeting took place on Monday, at Copthall House, E.C., the Hon. Howard Spreadly (the

hairman) presiding.
The SECRETARY (Mr. A. H. Ozenford) read the notice calling

The Secretary (Mr. A. H. Oxenford) read the notice calling the meeting.

The Charrman said: Gentlemen—This, as you are aware, is our first meeting, the company having been registered in September last. Although the times since then have not been very propitions, we have been able to carry through satisfactorily two very good pieces of business, and we have some farther good business in hand, which promises equally good results to us. As you know, we have had the privilege of being associated in our business with that successful company, the Explorers' Syndicate (Limited), and we owe a great deal of our success to that fact. We have now the satisfaction of declaring an interim dividend to all shareholders on the register at the rate of 10 per cent. per annum on the paid-up ordinary share capital for the four months ending January 31, 1896. (Cheers.) Dividend warrants will be issued early in February. I think this is the best syidence you can have of the work we have done, and I hope that at the end of our first year we shall be able to give you a much larger dividend. This concludes our business to-day. (Applause.)

Mr. Barewell moved, and Mr. Byrns seconded, a vote of thanks to the Chairman and directors, which was carried unanimously.

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THE ASSOCIATED GOLD MINES OF WESTERN AUSTRALIA, LIMITED.

Aspecial general meeting of the shareholders of the above the state of t

sidiary company, formed under the auspices of the Associated Gold Mines, is a very promising mine, carrying the Lake View lode through the whole extent of the lease. Three vertical shafts have been sunk, the deepest being 138 feet, and each ahaft strikes the reef at points over a distance of 300 feet. At the 100 feet level these shafts are now connected by drifting on the course of the lode, which is exceedingly well defined and carries uniformly good ore. From careful sampling over about 200 feet of this formation he found that the lode averaged fully 1½ cunce to the ton. Bulk samples from the face in several portions of the drift gave as high as 10 cunces to the ton. On the Lake View south the erection of a 10 head stamp battery is fast nearing completion. Dealing with the Adelaide and the Lake View Australia, and Australia East lodes. On the Lake View Australia, and Australia East lodes. On the Lake View Extended, just before he left the field, a crosscut was being made, and a very large formation was being cut carrying a fair value. This crosscut, which is now being run at a level of a 100 feet, should, in the next few months, prove the existence of the lodes he had mentioned. On the Australia they had during the last three months made developments at the mort as which stamped this lease as one of the mort reliable.

Conditions of this amended At. The Chairman concluded by formally moving the adoption of the caption of the receive formally moving the adoption of the receive formally moving the adoption of the receive formally moving the adoption of the receive formal proving the adoption of the receive formally moving the adoption of the receive formally moving the adoption of the receive formally moving the adoption of the receival conditions of this amended At. The Chairman concluded by formally moving the adoption of the receival conditions of this amended At. The Chairman concluded hy formally moving the adoption of the receival conditions of this amended At. The Chairman that the servery fully to you t level of a 100 feet, should, in the next few months, prove the existence of the lodes he had mentioned. On the Australia they had during the last three months made developments at 50 feet, which stamped this lease as one of the most valuable in the whole field. At this point a chute of ore was cut, which as far as they had gone was exceedingly rich and carried a large percentage of coarse gold. At the 70 feet the ore in the shaft gave a value from bulk samples of 12 ounces to the ton. (Applause.) Late advices from the fields were to the effect that the sich ore was continuing down, and that some of the stone now being taken out is so richly impregnated with gold that it is to be bagged in the shaft, and when brought to the surface, stored in a place of safe keeping. The point at which the rich ore was struck was about the same depth as the places in the Great Boulder Mine where the rich chute was picked up. Another very important feature was, that in all the other portions of the camp where exceptional rich chutes had been found they held for a considerable depth, and as the Australia lode had already been traced for a long distance on its strike it was not to be expected that the action of the chute would prove an exception to the rule. He congratulated the shareholders on possessing in Australia one of the richest mines in the colony.

At the request of the shareholders, Mr. W. G. Broowney the colony.

the colony.

At the request of the shareholders, Mr. W. G. BEOOKMAN, the original prospector of the blocks, then addressed the meeting, and after enumerating the difficulties of his first experience in Australia, he went on to say: "That the properties owned by the Associated Gold Mines were some of the best in Australia. In the Australian block they were in a bonanza. The whole of the Australian group—the Australia north and the Australia east—taken alone, were sufficient guarantee for the life of this company without the southern and more northernly blocks." (Applause.)

Mr. Barry: I should like to ask if there is any improvement in the transport facilities, under the difficulties of which you laboured in the early days?

Mr. Gray: The railroad is now being built towards Hannan's, and I expect it will be there on June 1. That will enable us to save on machinery alone something like £18 per ton. (Applause.) All

and 1 expect it will be there on June 1. That will enable us to save on machinery alone something like £18 per ton. (Applause.) All other supplies will show a proportionate saving, of course. This will also enable us to get better labour. The facilities for moving about the country will be cheaper.

The CHAIRMAN: No doubt everyone will feel that it is due to our friend, Mr. Gray, that we should move a hearty vote of thanks to him for his clear exposition of the present state of affairs at the mines.

affairs at the mines

Mr. Pearson: I shall be very glad to move:—"That the best thanks of this meeting be presented to Mr. Gray for the very clear exposition he has given of the affairs of our company, and for the trouble he has taken in connection therewith."

Mr. Leigh Hunt seconded the resolution, which was carried with selemetion.

Mr. Grav: I have to thank you very much for your expression of appreciation, and I only hope that when I meet you some 12 or 18 months hence, I shall be able to give you something more substantial than mere words.

Hearty votes of thanks were also passed to Mr. Brookman and the Chairman, which terminated the proceedings.

rned. (Hear, hear.) Mr. Grey: Do I understand you propose to delegate your

powers to a local board?

The CHAIRMAN: There is to be no local board. It is a very dangerous thing to delegate powers to a local board, for they are frequently overstepped. (Hear, hear.) We shall not have a local board, but merely a representative there, whose duties will be to facilitate the transfer of shares from one holder to

The resolutions were then put to the meeting and carried

unanimously.

The resolutions were then put to the meeting and carried unanimously.

The CHAIRMAN then said: My colleague, Mr. Lane, has been good enough to give you some information as to the present position of your property and its prospects for the future. I coincide with the remarks he has made. Hitherto there has been apparently, but not in reality, a little sluggishness in our rate of progress; but various circumstances occurred which prevented greater speed being made, especially in regard to the sinking of the Larnach shaft. That shaft is, or has been, our objective point. At present our operations are confined to the 300 foet level, where we are getting good gold. At Scotty's these operations will be pushed in an eastward direction until we get under the Albion shoot of ore. We are also progressing favourably at the 400 feet level and getting gold there, as also at the 500, the 600, and the 800. You will have gathered some time ago from the reports that our object was to test the ground below the 800, as to whether the ore ground went down below that level or not. The Government gave us all the assistance they or not. The Government gave us all the assistance they possibly could, and lent us a diamond drill for the purpose of boring and testing the ground. We have done so to 1000 feet, and we are so parfectly satisfied with the nature of the ground as to justify us in sinking the shaft many feet below the 800 feet level. We are 130 feet below the 800 feet with the diamond drill, but you will read that with the corresponding on the shaft many feet with the diamond drill, but you will read that with the corresponding on the shaft many feet below the 800 feet level. diameter, me may only be merely on the edge of the reef. The assay, however, from the core which was brought up by the drill gave 3 dwts. to the ton. As soon as we were satisfied that we had gave 3 dwts. to the ton. As soon as we were satisfied that we had this favourable ground to go through, sinking was immediately commenced, and is now in full swing. If I may venture to express my own views in connection with this property, they are that any man who invests in the Kapanga Mining Company, and is not in too great a hurry, is perfectly certain to get remarkably good return for his money. I say that for a number of reasons, but more particularly because we have an abundance of certain to the particularly because we have an abundance of certain to the particularly because we have a manual production. number of reasons, but more particularly because we have an abundance of capital to take us as low as we like to go, and to spread out our operations over the whole of the property. (Cheers.) A colleague has suggested to me that it would be very satisfactory for you to know what our capital really is. Well, I may safely say that we have intact upwards of £50,000 working capital. (Cheers.) Now, there is a gentleman present who is perfectly familiar with this property, and who has been in many ways of assistance to us in connection with the administration, giving us his views as to the management. I allude to Mr. Witheford, who will, perhaps, address the meeting.

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were substantially the same as had been passed at the previous meetings of the Hauraki and Kapanga shareholders.

Mr. Lanz seconded the resolutions, saying that the company was at present in its infancy. The shaft was being sunk with all possible speed, and they hoped soon to be down a sufficient distance to put out levels, and out the reefs which were known to avise an the property. Already they were down a considerable exist on the property. Already they were down a considerable distance, and the ground indicated that their property ought to be an extremely valuable gold-bearing property. As soon as reports were received from the colony they would be published in the mining papers.

in the mining papers.

The resolutions were then put and carried unanimously.
The CHAIRMAN added that the operations were proceeding satisfactorily, but that the sinking of the shaft had been slightly delayed owing to a breakage of the wind-bore.
On the motion of Mr. Brown, seconded by Mr. WITHEFORD, a cordial vote of thanks was given to the Chairman and directors, and a brief acknowledgment of the compliment from the chair terminated the proceedings.

THE HAURAKI GOLD MINING COMPANY, LIMITED

An extraordinary general meeting of shareholders in the Hauraki Gold Mining Company (Limited) was held yesterday, at Winchester House, E.C., for the purpose of passing resolutions bringing the company's Articles of Association into conformity with the Colonial law.—Mr. Henry Wilson pre-

The SECRETARY (Mr. W. J. Lavington) read the notice convening the meeting, and the resolutions it was proposed to

The CHAIRMAN moved, in one sentence, the resolutions, which were seconded by Mr. CECIL HARTRIDGE, and carried unani-

mously.

The Chairman subsequently made a brief statement as to the The CHAIRMAN subsequently made a brief statement as to the present position of the company's property, saying that it was as satisfactory as they could possibly wish. (Hear, hear.) No delay had occurred in any part of the operations, and there was scarcely a point which had been attacked, and had not made them golden returns. The company was still in its youth, but on a capital of £40,000 they had paid £64,000 in dividends, so that they would see the Hauraki property was not a bad one. Up to the present time nearly all their wealth had come from above the 160, but they now intended to determine the value of the ground in the lower part of the mine. Captain Hodge had pushed on with the works with wonderful energy, as appeared from the fact that he was already 50 feet below the 160. Shareholders would remember that at the last meeting they emphasised the fact remember that at the last meeting they emphasised the fact that the company had acquired a new property, called the Iona, and there was every indication that it would turn out a most and there w valuable addition to the company's property, and they had not paid much money for it. The Chairman concluded by saying that there was a sample of the ore in the room, which would enable the shareholders to see what their ground was producing

The sample was handed round for inspection by the share

Mr. R. T. Brown quoted from a Colonial paper a statement showing the extreme productiveness of the company's property, and putting the production at a higher figure than had been assigned to it by Mr. Witheford.

The CHARMAN, in reply, said that this was only a newspaper report, and, notwithstanding that it was substantially correct it might be slightly in excess of the actual product of the

A SHAREHOLDER said that from a careful study of the reports be was of opinion that the statement cited by Mr. Brown was not at all

ot at all exaggerated.

A vote of thanks to the Chairman concluded the meeting.

HANNAN'S FIND GOLD REEFS, LIMITED.

The first ordinary general (or statutory) meeting of shareholders in this company was held on Thursday last, at Winchester House, E.C., the chair being occupied by General BATES.

The SECRETARY (Mr. Harry R. Hart) read the notice convening

The CHAIRMAN, in the course of his address to the shareholders The CHAIRMAN, in the course of his address to the shareholdere, and that since going to allotment, although developments had been continued, except during the respite allowed annually by the Colonial Government, they now had 100 tons of ore at grass, and by February 1 they hoped to have hastened on the work of development. The company obtained possession of the leases early in January, and the titles were found to be good and in order. The company had three mines, or leases—the Bohemian Girl, the Bohemian Girl North, and the Golden Pheasant, and there were three distinct reefs running throughout the leases, known as the Australia Main Lode, Royal Mint West, and Australia East Main Lode. Since, moreover, the mines were surrounded by very rich propersions. Since, moreover, the mines were surrounded by very rich proper-ties, there was every reason to suppose that there was a regular net-work of rich vein traversing the company's leases, The developments in the adjoining properties had turned out very satisfactorily, and held out the highest promise for the future of their own mines. The three leases were well proved before the company purchased them, and reports were furnished by Mr. William White, member of the council of the Australian Institute of Mining Engineers, who stated that in the Golden Pheasart lease there were two well-defined rarallel lodes, one of which had every appragrance of heing a true fiesure lode. On this a short had every appearance of being a true fissure lode. On this a shaft had been sunk, the ends of which showed gold freely from about 20 feet to the bottom, and which would yield by treatment 23 cunces to the ton. Mr. J. F. Cudmore reported that one reef on the Golden Pheasant was 6 to 7 feet wide on the surface, in which fine gold Pheasant was 6 to 7 feet wide on the surface, in which fine gold could could be seen, and the other on the rame lease was a well-defined reef of quartz and ironstone, showing good gold, with regular walls, and going down almost perpendicularly. This, he estimated, would mill 3 ounces to the ton, while on the Bohemian Girl leases there was a large outcrop of ironstone, carrying gold veryifreely, which was the richest he had seen in the district. Mr. Henry Wright, certificated mining engineer, reported that two very valuable reefs were exposed in the Golden Pheasant, by s of trenches, and on one reef a shaft had been put down 52 feet, means of trenches, and on one reef a shaft had been put down 52 feet, proving its permanency. The reef increased in richness as depth was attained, at 30 feet averaging 3 ounces, and at 50 feet 4 ounces per ton. On the Bohemian Girl leases he stated that the ore was a black ironstone quarts, some of it being very rich, the poorest quality giving 3 ounces per ton, and for the extent proved the stone would give an average of about 4 ounces per ton, taking the rich stone with the poer. So far, they had not decided what machinery to order, having resolved to leave the matter over until they had been competently advised as to it. In conclusion, the Chairman stated that Colonel Burton Brown, who had had many years of experience in connection with gold mining in India, had consented to visit the colony, to look after the pre-liminary affairs in connection with the property, and more especially liminary affairs in connection with the property, and more especially to advise as to what machinery would best be suited to deal with The Chairman, in reply to a shareholder, said the company's ores. The Chairman, in reply to a snareholder, said the working capital was £15,000. They hoped, if everything turned out as was anticipated, soon to sell some of their leases, and so get back the capital of the company.

A resolution was finally passed, accepting with gratitude Colonel Brown's offer to visit the colony, and with votes of thanks to the Chairman and board, the proceedings terminated. the company's ores.

THE ANGLO-WEST AFRICAN CONCESSIONS
(LIMITED).

The statutory meeting of this company was held at the company's offices, 63, New Broad-street, on Monday.—The Chairman stated that the business of the company was progressing rapidly and that it was the intention of the directors to develop rapidly, and that it was the intention of the directors to develop the mahogany and other important trading interests without delay, and, if necessary, to form subsidiary companies.—[Com-

WAIHI GRAND JUNCTION GOLD COMPANY (LIMITED). WAIRI GRAND JUNCTION GOLD COMPANY (LIMITED). The first general (or statutory) meeting of shareholders in the Waihi Grand Junction Gold Company (Limited) was held on Wednesday, at Winchester House, B.C.—Mr. L. Welstead, who presided, said that the company was formed by the late syndicate in order to provide the necessary capital so that works of a permanent character might be carried out. At the time of the issue of the company the markets in Lundon were in a very depressed condition, notwithstanding which the amount of capital offered to the public was over subscribed. After the allotment a local management was appointed at Auckland, which was composed of sound business men, thoroughly acquainted with the mining sound business men, thoroughly acquainted with the mining industry in New Zealand. They were members of the New Zealand Chamber of Mines, and one of them was the President. The late manager, Mr. Walker, who acted for the syndicate, re-The late manager, Mr. Walker, who acted for the syndicate, requested to be relieved of his position, and another manager had been appointed. The transfer of the property, including the machinery, had been effected. The position of the property alone attested its value, one block being on the north-west of the Waibi, and the other on the south-west. Both blocks were in the direct course of the Martha and Welcome reefs. Work had been going on continuously. The shaft on the Grand Junction block was 12 feet by 4 feet in size, and was now down 187 feet. The top part of this shaft had all been packed with clay, in order to prevent the surface water from scaking down, and the whole of it had been close-timbered as far as they had got down. A pump had been rat into position, and pipes had been laid down in case water should be met with in any large quantity. The shaft on the Waibi West Block was 9 feet by 3 feet in size, and at the end of last year it was down a depth of 170 feet, in size, and at the end of last year it was down a depth of 170 feet, from whence it was proposed to crosscut. A cable received that morning stated that the crosscut had been driven nearly a distance of 20 feet in highly mineralised ground. The financial position of the company might be briefly summarised. The capital offered to the public was £27,500, of which there was £335 only outstanding on the allotment. The amount sent out to New Zealand for the on the allotment The amount sent out to New Zealand for the company's purposes was £2700, and the other expenses, including the preliminary expenses, amounted to £885. The balance left in the preliminary expenses, amounted to £385. The balance left in band was £23,580. The Chairman concluded by speaking in high terms of the company's prospects, and quoting from an article bearing on the company's property which appeared in the columns of The Mining Journal on January 11.—A vote of thanks to the Chairman terminated the proceedings.

GOLD ESTATES (TRANSVAAL) COMPANY (LIMITED).
An ordinary general meeting of the Gold Estates (Transvaal)
Company (Limited) was held on Wednesday, at the Cannon street Company (Limited) was held on Wednesday, at the Cannon-street Hotel, Mr. Alexander Davidson presiding.—The Chairman, in moving the adoption of the report, said the affairs of the company were in a better and more satisfactory condition than during the past two years. They had got rid of the incubes of the Nooitge-dacht Mine; the movement, which took place in South Africa, caused a demand for such properties, and they had met with a cash purchaser for £12,900. They had also the opportunity of making some rather good investments with the call of 2s. 6d. that had been made, and the profits of £5314 shown for the year were all made in this manner. Notwithstanding this, they felt that no satisfactory result could accrue so long as the capital stood at the high figure of £140,000. The board, therefore, recommended a reconstruction without applying to the Courts. Thay had stood at the high figure of £140,000. The board, therefore, recommended a reconstruction without applying to the Courts. They had a fair amount of working capital and also some sound investments. As to the proposed reconstruction, the meeting which was to have followed the present one, and at which the scheme would have been submitted, would be adjourned for three weeks, for the reason that within the past three days they had been approached from two different quarters with proposals for amalgamation. If this could be carried out a strong combination would be formed, which would be of great value to this company. If nothing came of the negotiations they could, of course, fall back on the original scheme for reconstruction.—Mr. J. J. Hamilton seconded the motion for the adoption of the report and accounts, and the proceedings terminated.

TOLIMA MINING COMPANY (LIMITED). An extraordinary general meeting, convened by requisition, of the shareholders in the Tolima Mining Company (Limited) was held at Winchester House, E.C., on Thursday last, for the purpose the enarcholders to the purpose held at Winchester House, E.C., on Thursday last, for the purpose of considering a resolution restricting the remuneration of the directors.—Mr. B. L. Barrow, who presided, at the outset of the proceedings, thanked the shareholders for the vote of sympathy accorded to him at a recent meeting on the illness of Mrs. Barrow, He then called on the requisitionists to move a resolution.—

The state of the purpose of the purpos Mr. Storey then formally proposed a resolution altering the Articles of Association so as to decrease the directors' fees, and, in doing so, said be had been of opinion ever since his connection with the company that the directors' fees were too high, and as soon at it had become obvious that the directors themselves did not intend to take any steps in the matter he had made arrangements for bolding that meeting, so that the question might be gone into support of his position he quoted figures of the remuneration g to the directors of other companies, with the object of should be a support of the companies. that the amount received by the directors of the Tollma Company was excessive—Mr. Butler seconded the resolution, maintaining that the remuneration to be received by the directors under the present articles was too high, and that the directors are the present articles was too high, and that the directors are the present articles was too high, and that the directors are the present articles was too high, and that the directors are the present articles was too high, and that the directors are the present articles was too high, and that the directors are the present articles was too high, and that the directors are the present articles was too high, and that the directors are the present articles are the present ar as a board had established no special claims upon the shareholders.

—Mr. Burt strongly opposed the resolution, saying that criticisms on the action of the present board came with a very bad grace from gentlemen who were anxious toget seats on the directorate themselves. and reminded the meeting that when the company's affairs were in a very bad way, and seemingly beyond all hope of resuscitation, the shareholders refused to aid the directors, and the board had themselves advanced the money necessary to keep the concern going, and to bring it to the present condition of prosperity.—Several other abareholders spoke to the same effect.—Eventually the resolution was put and lost by a large majority, only four voting in its favour.—The directors who were present abstained from voting.

LEVANT MINE.

LEVANT MINE.

A four-monthly meeting was held on the mine on Tuesday, the Purser (Major White) being in the chair. There were present Mesers. George Coulson, Hodge (Harvey and Co.), Peter Olds (Trewellard), R. H. Boyns, Eichard Thomas, and John Holman; Capitala William James, of Wheal Basset, Mesers, Andrew James, Henry Olds, Ralph Chirgwin, Richard Davy, R. P. Couch, and Rich (Redruth).—The accounts showed the following items:—Labour cost, September 28 to December 21, was £7948; merchants' bills. £2014; coals, £761; rents, taxes, &c., £269; interest and commission, £55.—£11.046. 1255 tons of tin realised £4660: 1268 of copper. £2014; coals, £701; rents, taxes, &c., £209; interest and commission, £55—£11,046. 1264 tons of tin realised £4650; 1268 of copper, £5290; arsenic, £295; carriage, £421; discounts, £31—£10,688. Loss on the 16 weeks, £368; unfavourable balance last account, £91—£449. These accounts were passed. No call was made—The agents reported that the mine looked better, especially in the west part. The deeper levels were about the same, and they had every hope that were the world be raised during the next 16 weeks than the last. nore tin would be raised during the next 16 weeks than the last. After some discussion a resolution was passed that the buildings on the mine be insured against fire; also that the mine be insured against legal actions, and not accident, in the Employers' Liability Insurance.—The loyal toasts were proposed, after which Mr. John Holman gave "The Health of the Perser," which was heartily drunk and responded to.—Mr. Herbert Boyss, who had just returned from Africs, gave a short but interesting account of his trip and his visit to the New Comet and Witwatersrand Mines, and the proceedings terminated.

SOUTHERN LAND (LIMITED) The sixth annual ordinary meeting of this company was held on Monday, at the Cannon-street Hotel, Mr. Heary Pasteur presiding,—The Chairman, in moving the adoption of the report and accounts, referred to the various items in the balance-sheet, and stated that the calls in arrear amounted to £679. Nearly £150s and stated that the calls in arrear amounted to £679. Nearly £150s and stated that the calls in arrear amounted to £679. Nearly £150s and stated that the calls in arrear amounted to £679. and accounts, referred to the various items in the balance-sheer, and stated that the calls in arrear amounted to £679. Nearly £1500 had been paid by shareholders for calls in advance. As the heavy decline in prices during the last few months gave favourable openings for the investment of money, the directors proposed to call up the balance of 5s. still due on the shares. During the year under review the sum of £2335 had been paid for quit rents, but this did include the amount under dispute (£1090), which the company had been compelled to pay to the Colonial Office. This expenditure would be considerably reduced next year, as in view of the increasing value of the land one-half of the quit rents had been charged to capital account, and the other half against the year's expenditure. In addition to the profits of £5343 made by the sale of investments, a further profit of £3445 had been realised since June 30 last. Taking the total cost of their land at £52,510 for their 682,915 acres, their land worked out at 1s. 6d, to 1s. 7d, per acre. They had been recently advised by their representative on the spot that the present value of their farms was about 7s. 61, per acre for those along the line of the railway, whilst the more distant ones, some 60,000 acres, were worth 2s. 6d, per acre. If they could succeed in effecting sales at anything like those prices, the result to the company would be most satisfactory.—Mr. R. W. Murray, who spoke in enthusiastic terms of the prospects of Bechuanaland, seconded the motion, which was carried.

THE MARIE ROSE GOLD MINING COMPANY (LIMITED) extraordinary general meeting of shareholders in the Marie Gold Mining Company (Limited) was held on Monday, at Winchester House, for the purpose of confirming resolutions passed at a previous meeting, substituting a set of resolutions, then sub-mitted, for the Articles of Association of the company.—Lord Ds Lisle and Dadley, who presided, explained that the resolutions had been considered at a very full meeting of shareholders, and that it was, therefore, unnecessary for him to do more than propose the resolutions.—Mr. Louis Eissler seconded the motion, which was carried unanimously, and the proceedings terminated with a vote of the Chairman and board. thanks to the Chairman and board.

OCEANA TRANSVAAL COAL COMPANY (LIMITED). OCEANA TRANSVAAL COAL COMPANY (LIMITED),
The second annual general meeting of shareholders in the Oceana
Transvaal Coal Company (Limited) was held on Wednesday, at the
Cannon-street Hotel.—Sir Frederick Young, who presided, in
referring to the financial position of the company, said, in reference
to the balance-sheet, that the entries under share capital showed
that at June 30 last 17s, per share had been paid up on the 30,000
shares issued to the public. Since that date a further call of 2s, per
share had been made, making those shares 19s, paid. The calls in
arrear standing at £232 had been paid, with the exception of one or two
small amounts; in fact, the total calls unpaid at the present time small amounts; in fact, the total calls unpaid at the present time only amounted to £32. The sundry creditors in London, £46, con-sisted of two or three small accounts, since paid, and the amount due in the Transvanl, £1158, consisted of the balance due on due in the Transvani, £1108, consisted of the balance due on general accounts for store, &c., requiring no comment. The extension of the Natal railway system would be of great use to the company, by bringing them into closer communication with the consuming centres. The Chairman concluded by moving the adoption of the report and accounts,—Mr. G. T. Rait seconded the motion, which was carried unanimously.

UNITED GOLD FIELDS OF MANICA (LIMITED).

The third ordinary general meeting of shareholders in the United
Gold Fields of Manica (Limited) was held on Wednesday, at the Cannon-street Hotel, for the reception of the balance-sheet and accounts for the year ended September 30, 1895.—Mr. W. M. Farmer, accounts for the year ended september 30, 1895.—Mr. W. M. Farmer, who presided, in moving the adoption of the report and accounts, said that about £2600 was still outstanding upon calls, and since money was required for prospecting work it was of the first necessity that these calls should be got in. The revenue suspense account represented the balance to credit of revenue account in shares of sity that these calls should be got in. The revenue suspense account represented the balance to credit of revenue account in shares of other companies, entered at par. As soon as these shares could be realised to advantage for cash they would form a nucleus of profit towards a future dividend. The company had at present about £1200 as the bankers, and about £400 was on its way out to Umtall, and if the arrears of calls were paid in with reasonable promptitude, the directors would have funds sufficient for immediate needs. But in view of the desirability of exploring the Birthday Reef claims, and of exercising the rights of the company to locate the large number of 430 further claims, it would be necessary before very long to call up a forther proportion of capital if the interests of the shareholders were to be pushed with vigour. The directors regretted that owing to the illness of Mr. Ferguson they had not received assays to determine the value of the reef discovered in the shafts and galleries. These, however, would arrive, it was hoped, shortly, when they would be communicated to the shareholders. Assays made officially in Johannesburg for an adjoining mine had shown the average gold contained in the reef of their deep winze, 60 feet below water level to be fully 30 dwts, per ton. The pannings on the mine, however, showed only a trace of free gold.—The motion for the adoption of the report and accounts having been seconded, was carried unanimously, and the retiring director and the auditors having been re-lected, the proceedings terminated with a vote of thanks to the Chairman and board. director and the auditors having been re-elected, the pro-terminated with a vote of thanks to the Chairman and boar

THE DOLLAR GOLD MINES (LIMITED). THE DULLAR GULD MINES (LIMITED).

The first ordinary general (statutory) meeting of the shareholders in the Dollar Gold Mines (Limited) was held on Saturday last, at the registered offices of the company, 23, College-hill, E.C.—Mr. Robert Clement, who presided, said that work had been steadily progressing on all the leases, but no detailed plans of the workings were yet to hand. Mr. John S. Cape was the manager for the vendor company, and also, for a short time, acted for them. He left, after two years' residence in that country. for them. He left, after two years' residence in that country, for a holiday, and the board, on the recommendation of their representative in Western Australia, Mr. Taylor, appointed Mr. representative in Western Australia, Mr. Taylor, appointed Mr. T. H. Harris as their manager, on approval, for six months. Mr. Taylor having left Australia, Mr. Revell B. Reade was appointed to take his position in his absence. Mr. Reade was an engineer of great attainments, and the board had the greatest confidence in his policy and his reputation. The company's property had been very satisfactorily reported on by Mr. Cape, who in the course of his statement, said:—

"I have seen also some excellent stone which comes from the course of the course of the company's property had been very activate the course of the statement, and the course of the company's property had been very layer there is not the course of the course 40 feet level in this shaft, but below water level there is no question of the gold being plentiful, as I have never once prospected stone from there without getting a return equal at the very least to 4 cunces per ton. At 95 feet a drive has been put in to the north 15 feet, the reef continuing the same throughout."—After some discussion a vote of thanks was given to the Chairman, and the proceedings terminated.

RAND MINES (LIMITED).

RAND MINES (LIMITED).

The next ordinary general meeting of shareholders in the above-named company will be held at the board room, City Chambers, Johannesburg, at 12 o'clock noon on Thursday, March 19, for the following business:—(a) To receive and consider the statement and profit and loss account and balancesheet, and the reports of the directors and auditors. (b) To elect two directors in the place of Meesrs. S. Neumann and H. Mosenthal, who retire by rotation in terms of the trust deed, but are eligible and offer themselves for re-election. (c) To appoint auditors for the ensuing year and to fix the remuneration of the present auditors. (d) To transact any other business which is brought under consideration by the report of the directors and for general business. the directors and for general business.

The OURO PRETO GOLD MINES OF BRAZIL (LIMITED) has declared an interim dividend of 1s. per share (free of income-tax)

payable on February 15.

MINING IN NEW ZEALAND.

(FROM OUR OWN CORRESPONDENT).

In dealing with this section of our gold peninsuls, perhaps it is as well to mention that the sandstone encasing the lode belt of the Thames gold field is entirely different in character from that accompanying the reef system of Ohinemuri, and more especially that class met with in the Waihi and Waite-kauri districts. In the latter centres the country rock is of a brownish nature, and where rich shutes of ore are met with a deep purple hue accompanies the brown formation, whereas on the Thames the sandstone, in most instances, is white, with an inclination to become recently.

character from that accompanying the reef system of Ohinemuri, and more especially that class met with in the Waihi and Waite-kauri districts. In the latter centres the country rock is of a horomish nature, and where rich shutes of ore are met with a deep purple hue accompanies the brown formation, whereas on the Thames the sandstone, in most instances, is white, with an inclination to become more blue as greater depth is reached. The lodes in size hereare much smaller than those in the Ohinemuri. Although not of small dimension, they are more numerous, and the class of ore is very much richer in quality, where, on the other hand, the lodes not only being of immense size, are more average grade as regards quality, and the shutes of rich ore are of greater length on the Waihi, Waitekauri, and Karangahake, to that met with in the Thames belt of ore lodes. If must not be torgotten that the developments in the above districts have not as yet reached that depth that the Thames mines have attained. It will, therefore, remain for time and further development to prove the continuity of the gold downwards.

As my letter on this occasion is to be devoted solely to the Monatairi, which, by the latest information to hand, I gather than the property has been successfully placed on the London market by Mr. F. A. White, of Auckland. The asquirement of capital for the further extensive development has been the desire of the shareholders for some time back. Now that the long-felt want will shortly be to hand the vigorous development of this valuable property will be realised. Up to the present extensive development of this valuable property will be realised. Up to the present of the shareholders for some time back. Now that the long-felt want will shortly be to hand the vigorous development of this valuable property will be realised. Up to the present of the accession of the present of the accession of the present of the continuity of the gold downwards while the lodges in the long-felt want will be the long-felt when the secon

May Queen Gold Mining Company.

main fault.

May Queen Gold Mining Company.

The sections of ground embraced within this company's area at producers of high-class ore, and have been under operation agreement of the perfect of the Mining Company. The sections of ground embraced within this company's area at producers of high-class ore, and have been under operation agreement of the May, City of London, Saxon, Exchange, and Trenton Companies. All have now been amaginganated, and one large company formed.

Agreement of the May, City of London, Saxon, Exchange, and Trenton Companies. All have now been amaginganated, and one large company formed.

Agreement of the Mining News of July 11 and 18 last, nothing has been therefore exchange and the truthfulness of the high present levels. As a possible of the part of the managing the perfect of the Mining News of July 11 and 18 last, nothing has been heard from either Mr. C. T. Elmaile, or M. B. Elmaile, company in destination of these areas, and the possible of the part of the managing of the product of the part o

Saxon and Trenton rest system is quite a distinct belt to that of the May Queen, although all traversing through the one area of ground embraced by the company. The Saxon lodes, where developed by that company, proved to be gold-bearing right down to the lowest or No. 6 level; on this level the richest ore down to the lowest or No. 6 level; on this level the richest ore in the mine was obtained, thus proving that this system of lodes apparently improve in size and quality as a greater depth is reached upon them. The same remark applies to the Queen and Treuton sections. The extent of payable ground opened up for stoping purposes is ample to keep the company's 32 stamp mill continuously employed for some time to come; of course a still further stretch is being opened up on the two main lodes, by the extension of levels east and west upon their respective trends, to what extent payable ore will exist, time alone will reveal; but whilst the present congenial class of respective trends, to what extent payable ore will exist, time alone will reveal; but whilst the present congenial class of country accompanies the lodes, then the continuity of payable ore will manifest itself. Referring to the company's 32 stump mill, I may add that the plant is fitted up with all the latest appliances for the saving of the gold, and another feature is its economical working capacity. The whole plant is driven by motive power, and it is splendidly lighted with electricity, which is also obtained by the same acquirement. It will be seen that is also obtained by the same acquirement. It will be seen that this mine is one that capitalists need have no fear as regards a good substantial return for their outlay; I look upon it as one of the coming mines on this peninsula.

May Queen Extended Gold Mining Company. May Queen Extended Gold Mining Company. This company's ground lies to the eastward of the May Queen, and adjoins the Lone Hand section of that company. It embraces the easterly trend of the May Queen and Queen of Beauty reef system. The production of gold from this mine when worked by private individuals was considerable; one return is worthy of note, 240 tons of ore gave a return of 990 ounces of gold, valued at £3 is, per ounce; this was broken out of a lode fully 5 feet in thickness and worked down to the water level. Nine large lodes trend through this area and all proved to be gold-bearing to the water level. Capital is required here for further development, and as the deepest point reached so far is 150 feet, the directors have decided to offer the property and acquire capital sufficient to develop the lodes as they warrant. they warrant.

As time will not allow of my dealing with other important mines on this gold field, I will have to leave it stand over until next mail, when I hope to be in a position to give a short history on the famous Queen of Beauty Mine for which a company is being formed in London, and for which the Government of New Zealand will subsidise with a grant of £25,000.

New Discoveries.

A large lode formation has been discovered 5 to 6 miles northeast of the Waitekauri Gold Mining Company, in a part of the gold field known as Wharekearaupuga. The formation is of immense thickness, and pounds free gold from any part or portion of the lode. It was discovered by a party of prospectors sent out by the Auckland Prospecting Association, a company quite recently inaugurated for the purpose of sending out quite recently inaugurated for the purpose of sending out and prospecting the miles and miles of unexplored country long the whole length of this gold-bearing peninsula.

Quite recently four new discoveries have been made in the Whangamata district which lies four miles further north of

whangamats district which lies four miles further not not of Wharekauraupunga. The lodes unearthed are quits a distinct section to that of any other district, and the lodes are of very great magnitude. The one embraced within the area of the Golden Mount claim measures fully 25 feet in thickness, whilst another lode unearthed to the south of that shows a thickness. of 14 feet, and samples of ore taken from different parts of the lode gave results by assay from £5 up to £40 per ton. Free gold can be seen pretty freely through the general ore. On the whole, the reef system is augured to be the best so far opened up; even the great Waihi is nothing to it in comparison to its general richness.

general richness.

In my next I hope to supply in detail an account of the discoveries.

CORRESPONDENCE,

🐶 We wish it to be understood that we do not held ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All com-munications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.

LA REINE D'OR GOLD MINING COMPANY.

TO THE EDITOR OF "TRE MINING JOURNAL."

SIR, —A letter, signed by C. T. Elmslie, in your issue of October 12, is now before me. By this mail I send you a series of articles which, no doubt, formed the basis of the statements contained in your issue of October 5, and referred to by Mr. Elmslie—statements which, up to the present, remain unchallenged either in the public Press of Queensland or in the Law Courts, and the truthfulness of which the proprietors of the Mining News (Messrs, Murphy and Hobert) are at any moment perfectly prepared to substantiate. Mr. Elmslie states that "these will be attended to in the proper place." It is passing strange that, although the comments on the flotation of La Reine d'Or appeared in the Mining News of July 11 and 18 last, nothing has been heard from either Mr. C. T. Elmslie, or Mr. A. B. Elmslie, the local representative of Elmslie (Limited) and the gold mining company in question. We are quite prepared to meet Mr. Elmslie "in the proper place."

Mr. C. T. Elmslie states that "the principal portions of the mine were purchased from men who had held the same for two years or more." That this is a deliberate lie is proved by the following extracts from the books of the Wardan's Office, Croydon gold field:—

"Mineral Lesse No. 1 (10 acres), applied for by E. R. Tasman, March 15, 1893. Forfeiture applied for by George Clough, August 17, 1893. Lease cancelled by Minister, September 9, 1893. Gold Mining Lease No. 447 (4 acres), applied for by Clough and party, September 26, 1893. Cancelled by Minister, February 23, 1894."

"Taken up as an extended claim" (200 feet by 400 feet) by S. Etherington and J. Ladams." TO THE EDITOR OF "THE MINING JOURNAL."

existence in law? Will Mr. Elmslie explain this? And will he also answer the following questions put to Elmslie (Limited) in the Mining News of July 11, and now put to him in your columns in the interest of shareholders in La Reine d'Or:—

1. Why on April 26, 1895, they applied on Croydon for a mineral lease to search "for any mineral or metal other than gold" on an area which on May 1 following—that is five days later—they declared in London to be "a splendid mine, containing quartz frequently showing gold?"

2. If La Reine d'Or Gold Mining Company (Limited) was formed to purchase and develop a gold mine—which is presumably the case, as it calls itself a gold mining company, and no product other than gold is mentioned in the circular—why did Elmslie (Limited) not apply for and dispose of a gold mining lease in accordance with the requirements of the law?

Mr. Elmslie's statement that the union opposed the granting of a mineral lease is untrue, but had the bodies referred to taken such action it would have been for the benefit of this field and the unfortunate shareholders in La Reine d'Or.

Mr. Elmslie states that the "Warden did not refuse to grant

Mr. Elmslie states that the "Warden did not refuse to grant the lease—he had no power to do so." This every man who knows anything of the Queensland Mining Law is perfectly aware of. The Warden recommends; the Minister grants. With reference to the Warden's opinion and action the follow-

ing report may be quoted:

LA REINE D'OR.

PLAIN SPEAKING BY ME. WARDEN PARKINSON.

"At the Warden's Court this morning (November 21) A. B. Elmslie, managing director of Elmslie (Limited), applied for a month's partial exemption for the famous La Reine d'Or Gel-l Mine. In considering the application, the Warden said: I have before me a circular issued by Elmslie (Limited) recommending shares in this mine as a good investment at 14., whilst the shares, as a matter of fact, are not worth as many pence. I do not believe in the manner in which this mine has been floated. It has done an injury to the field and this sout whilst the shares, as a matter of fact, are not worth as many pencs. I do not believe in the manner in which this mine has been floated. It has done an injury to the field, and this sort of thing should not be allowed to go on. I have also before me a letter from Mr. C. T. Elmslie, stating that a working capital of \$20,000 had been provided for the mine. If this is the case why do they require exemption? I think as many men as possible should be kept on. It is a big affair, floated for \$20,000, and if the unfortunate shareholders are to get anything out of it at all, it will be by working on a large scalusing out of it at all, it will be by working on a large scalusing was merely a speculation, and Elmslie (Limited) were certainly not justified in recommending it as anything elss. I visited it yesterday, and am of opinion that the full number of men could be employed, but will grant the exemption, because it may be of some advantage to those who have been enticed to purchase shares in the company. If the application had been from the promoters, I would unhesitatingly have refused it. In the meantime, I will keep myself posted in the work being done at the mine, and watch particularly any further applications for exemption."—Mining News of July 21.

It may be noted that these remarks were said in open Court to Mr. A. B. Elmslie, brother to C. T. Emslie. There is no possibility of "assuming" anything in regard to the property these remarks were meant for.

The company, so Mr. Elmslie states, has "purchased and erected powerful machinery, and has been working the mine now for some months past, and is at the present moment (October 10) raising and crushing ore." This "marvellous mine" has up to date yielded as a result of all this splendid machinery and crushing and raising, 110 tons for 42 ounces of retorted gold, worth 28s. 6d. per ounce. How do the favourable comments of the Golden Age, referred to by Mr. Elmslie, look in the light of this fact?

As Mr. Elmslie seems inclined to answer questions "in the proper p

look in the light of this fact?

As Mr. Elmslie seems inclined to answer questions "in the proper place," he will, perhaps, be good enough to inform your readers when he and his brother, A. B. Elmslie, qualified as mining engineers.—Yours, &c.,

W. S. Murphy,

Editor Mining Acres,

Croydon, Queensland, December, 1895.

AN INTERESTING ARSENIC MANUFACTORY IN DEVONSHIRE.

TO THE EDITOR OF "THE MINING JOUENAL."

DEAN SHE,—Being in the neighbourhood of Beeralston on Saturday last, I was induced to pay a visit to the celebrated works of the Gawton Mining Company (Limited), which is only a short distance from the London and South-Western Railway, and on the banks of the River Tamar. On entering the works from the top of the hill the first thing to catch the eye was the elevated tramway that is being erected. Close by this is the heavy crusher grinding up the mineral, and which is fed by means of a wagon, drawn up a steep incline with a wire rope. To stand here and watch the huge wheels with the drawing machinery drawing the wagons up and down is most interesting, especially when we consider the perfect manner they are worked round the various curves with but very little attention. The machinery seems to be working most beautifully, and shows that great skill and thought has been displayed in arranging the various machines. Adjoining the crusher house is the Jigger Department, which is fed automatically, and these machines are doubtless doing their duty well. From here we walk down the hill by the side of the steep inclined tramway and are not long in reaching the calciner house, where the massive tube known as a calciner is slowly but surely doing its work.

We go forward on and on over the long stretch of flues, and are astonished to see the work that is being carried on. On enquiry we find that this is the longest flue in England of this description, and the management, in order to get the best results from these, are taking the wise precaution of covering them with a fair description of the works would take up too much of your valuable space. That the mine is growing, and that very rapidly, is quickly apparent. For the new houses (in course of erecta n to take the other calciners on the mine) are being rapidly pushed forward, and the time cannot be far off when a handsome return must be made on the money that is being spent.

We were fortunate enough to come in contact with the genial Cantain Rowe, and a few minutes' c

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City sday, on-ance) To and trust (c)

(c) e re-other ert of) has tax) gentlemen. There appears to be every prospect of a rise in arsenic in the near future, if capital could be introduced into the neighbourhood; there are many valuable properties that would pay a sure and lasting dividend. The London management (of whom Mr. Peter Watson is Chairman), is in good hands, and with these gentlemen holding the helm there will be ere long a rapid and successful development of this mining interest of the west.

interest of the west.

I have not the words to appeal to those who have the means as I should like, but how these people can so easily be led to invest in properties that they have never seen, and no chance of seeing, in foreign lands, when there are such splendid opportunities outside their own door, is a mystery I cannot solve. I can only say, go and visit the spot, and see for yourself, as there is nothing like a personal visit, and should you desire additional information, just take a train into Tavistock, which is only a few miles, and we are sure that the gentleman before-named (Mr. M. Bawden) would not object to supply you with information that is beyond the power of the present writer.

In conclusion, I can only say that I went, and saw, and was satisfied; so much so, that the impression left on my mind will not be easily effaced, and I trust that before long I shall have an opportunity of again visiting this new hive of industry at Gawton Mine. Apologising for trespassing on the page of your valuable paper.—Yours obediently,

January 24, 1896.

THE BRITISH BROKEN HILL PROPRIETARY COMPANY, LIMITED.

TO THE EDITOR OF "THE MINING JOURNAL."

-When I opened the correspondence I distinctly referred to the treatment of sulphide ores from a chemical standpoint, when your correspondent, "Bona Fide Shareholder," chimed in, with a long yarn about an expenditure of £10,000, which I understand to be for something at least scientific.

Of course, I do not mean to assume that there is nothing

scientific about the mechanical contrivance, on which he fixes his "distinguishing" mark, but we really expected something better than the stale information he contributes.

I can now, of course, understand the cause of (to use an expression of his own) his "deplorable ignorance," or what is, pechaps, more likely, his attempt to cover the not altogether graceful demise or collapse of a little pet scheme of one of his

As to his boast about the company's financial position, the quality of the ore they are now approaching will make short work of some of it, but that is their business. What the public will be most interested in, will be the treatment of the when brought to grass, so as to rescue on a scientific as well as

economical basis, all the products thereof.

When this takes place I shall be very glad to congratulate "Bona Fide Shareholder" on the company's success, but his "Bona Fide Shareholder" on the company's success, but his attempt to induce the belief that £2000 to £3000 weekly can be saved upon an outlay of £10,000 for a mere mechanical con-trivance, of which everyone is cognisant, is a little more than we can swallow, and, therefore, makes the absurdity of his claim so patent that further correspondence upon the subject is absoso patent that further correspondent lutely uninteresting, as well as useless.

PRO BONO PUBLICO.

THE LAW: LIGHTS ON SIDE

Legal Jottings on Cases in the Courts, and on Questions affecting Mining, Railway, Financial, Industrial, and allied Interests.

BY A BARRISTER.

UR contemporary, the Law Journal, of last Saturday, contains what is said to be the Boer argument against the Queen's Suzerainty over the Transvaal, which is claimed by this country. Great Britain's case, shortly put, is that in 1881 the Queen granted to the inhabitants of the Transvaal, and the Boers accepted at her hands, the gift and guarantee of self-government under her Suzerainty or sovereignty, on certain conditions, which were appended to the grant. These two matters—namely, the grant and the conditions of the grant (which were contained in articles appended to the grant)—were embodied in what is known as the Pretoria Convention of 1881. Subsequently, on the Boers desiring to have the conditions amended by the London Convention of 1884, Her Majesty substituted new conditions embodied in the Convention of 1881. Great Britain, therefore, says the guarantee of self-government under the Queen's Suzerainty remains untouched with new conditions. The Boer's case appears to be that the guarantee of self-government in the Convention of 1881 was only a preamble or introduction to the conditions which followed, and that the Convention of 1881 only consisted of those conditions as interpreted by the preamble, and that subsequently the Convention of 1884 substituted the conditions of 1884 for those of 1881, and that in the latter there was no mention of Suzerainty. This contention they obtain from the fact that the Convention of 1884 declares that the there was no mention of Suzerainty. This contention they obtain from the fact that the Convention of 1884 declares that the new articles are to be substituted for the articles of 1881, and that the Convention of 1881 is to remain in force till the 1884 Convention is ratified by the Volksrand. Arguing from these terms that the implication is that after the ratification the Convention of 1881 will entirely cease to have effect, and that the new articles will take the place hitherto filled by the grant and articles embodied in the Convention of 1881. One would have thought that the only implication to be drawn was that until the ratification the grant of 1881 was to remain in force with the limitations as then contained in the 1881 conditions, and afterwards it was to be the grant of 1881 on new conditions as substituted. The weakness of the Boer argument is in this, that if the Convention of 1884 takes the place of that of 1881 in its entirety, then as no grant or guarantee of self-government is contained in the Convention of 1884, their title to self-government is gone, and in getting rid of the Suserainty they had cancelled their right to independence, and have in the place a Convention with empty conditions without any gift or guarantee. In fact, they are very much like the holder of a debanture with conditions endorsed on the back, who accepted new conditions in satisfaction and discharge, or in place of the debenture and the old conditions. I fancy most cople would prefer the debenture first, and the conditions fterwards.

Eveny Englishman dearly loves the horse, and therefore, the decision of Mr. Justice Collins last week, in the case the decision of Mr. Justice Collins last week, in the case of Young versus Bond, which raised a question as to the right of property in a horse which had been purchased, will attract doubtless more general attention than many other judgments affecting contracts of sale. The defendant Bond had purchased the gelding in question of a horse dealer named Jones, who had bought it of a man named Creasy, who had obtained possession of the animal

from the plaintiff Young in the following manner:—In March, 1895, Young advertised the horse, with a trap and harness, for sale, and to this Creasy replied, describing himself as of Hamilton Mows, Highbury, and offering £24 for them. The plaintiff accepted the offer, and subsequently the horse, trap, and harness were handed over to Creasy in exchange for a cheque for that amount, the latter explaining that he did not carry gold about with him, as he had once been robbed. Plaintiff, however, refused to give a receipt till he had had the cheque cashed. Subsequently, on its being presented, it appeared that the cheque form had been stolen, and Creasy had no account with the bank. For the defendant it was urged that he was a bona fide purchaser without notice, but the judge held that as the plaintiff had refused to give a receipt he did not intend to complete Creasy's title to the gelding until he had got cash for the cheque, and that consequently it was not a purchase and sale produced by fraud, but that the transaction by which Creasy year possession was larceny, and he accordingly gave judgment for the plaintiff against the defendant for the value of the gelding.

It is extremely difficult to agree with this judgment. The plaintiff and defendant are both men innocent of any fraud with regard to the transaction. The plaintiff, by parting with the possession of the gelding, had enabled the goods to get into the hands of the man who held them as the apparent owner, and as if he were the true owner. It is desirable to bear in mind what the law is relative to the title to goods obtained by purchase. "At common law," as Mr. Justice Blackburn said in the case of Cole v. the North-Western Back, "a person in possession of goods could not confer on another. "a person in possession of goods could not confer on another, either by sale or pledge, any better title to the goods than he himself had." This rule of the common law is now declared either by sale or pledge, any better title to the goods than he himself had." This rule of the common law is now declared by statute, Sale of Goods Act, 1898, Section 21, with this modification appended—"Unless the owner of the goods is, by his conduct, precluded from d-mying the seller's authority to sell;" and to this is added the proviso that nothing in the Act is to affect the provisions of the Factors' Act or any enactment enabling the apparent owner of goods to dispose of them as if he were the true owner; for instance, in the case of bills of lading. The Factors' Act, 1889, Section 9, however, provides "where a person having bought or agreed to buy goods obtains with the consent of the goods. . . under any sale . . or under any sgreement for sale thereof to any person receiving the same in good faith, and without notice of any lieu or other right of the original seller in respect of the goods, shall have the same effects as if the person making the delivery or transfer were a mercantile agent in possession of the goods with the consent of the owner." To understand his lordship's judgment, it must be taken that he held as a fact that, although there may have been an agreement between the plaintiff and Creasy, by which Creasy agreed to buy, yet, as a trick was performed upon the plaintiff by a false check being passed upon him, the possesion of the horse was not obtained with his real consent. It is to be hoped that the rule indicated in this judgment will not be extended, for to allow persons who have entered into a contract, and parted with the possession of goods, to obtain back be extended, for to allow persons who have entered into a contract, and parted with the possession of goods, to obtain back such goods from innocent purchasers for value, even though the first sale was induced by a trick, will be introducing an uncettainty in trade, which it is not desirable to foster, and which it is the object of the Factors' Act to remove.

The Bills of Sale Acts are to many business men oftentimes the subject of dread. Business transactions take place frequently by means of some document, which the parties never contemplated would come within the meaning of a bill of sale. On such occasions it is frequently the safer course to avoid the use of writing, and let the matter take place by conversation. This is not so fully realised, as it is well it should be for the sake of that absence of worry which is so essential to prosperous business. For instance, how often does one recollect if a person owes you a sum of money, and you desire to take some goods of his in the hands of some third person by way of security, that if you take from him a document giving you the right to take possession of those goods, that such writing may be set aside and declared invalid if you do not have it registered, it may still be set aside as invalid it it does not in form comply with the requirements of the Act. The result is that you lose your security, and the consequent worry follows which you could have avoided if the transactions had been a verbal one, and you yourself had just written a note to the person who held the goods acquainting him of the fact that your debtor had assigned the goods to you.

In a recent case before the Lord Chief Justica, a Mr. Fawert. THE Bills of Sale Acts are to many business men oftentime goods to you.

In a recent case before the Lord Chief Justice, a Mr. Fawcett In a recent case before the Lord Chief Justice, a Mr. Fawcet, who carried on a printer's business and had overdrawn his banking account, had some books which were with certain traders for sale. His bank required the overdraft reduced or security given. Mr. Fawcett accordingly saw the manager of security given. security given. Mr. Fawcett accordingly saw the manager of the bank, and agreed verbally with him to assign his interest in the books in question, and gave the manager an estimate of the value of the goods. Subsequently, at the request of the bank manager, Mr. Fawcett gave him a note to be sent to the people who held the books, stating that he had assigned the books to the bank, and requesting the books sellers to pay over the proceeds from the sales of the books to the bank. This the bank duly forwarded, and subsequently, on over the proceeds from the sales of the books to the bank. This the bank duly forwarded, and subsequently, on Mr. Fawcett's firm alleging that no assignment existed, an interpleader issue was directed to determine whose goods the books were. The Lord Chief Justice held that the right to the possession of the goods could be decided without reference to any document. That the right of the bank to possess the goods was complete before notice was written, and that as the notice was no agreement between the parties, and was no record of an agreement that helt taken place it was and was no record of an agreement that had taken place, it was not a bill of sale. It should be noticed that in this case it was not intended that the bank should take possession of the goods, but merely receive the proceeds of the sale, and there was no licence in writing given to seize the goods.

MR. FRANK NICOLAS, F.R.G.S., the well-known mining engineer of Coolgardie, having just arrived in England on a short visit, a committee of a number of West Australians, and persons in this country possessing interests in West Australia, has been formed for publicly welcoming him and wishing him a prosperous retein voyage. Accordingly, he will be entertained to dinner at the Holborn Restaurant next Thursday evening.

Wheneve received an advanced proof of a coloured map showing the international partition of Africa, which will be issued with to-day's edition of the African Review. Such a map at the present moment will be found extremely interesting and valuable.

Mr. A. E. WALTON, F.G.S., the well-known mining expert, has just returned from a tour of inspection of the Oripple Creek gold fields, Colorado, U.S.A.

Manganese Silicide.—M. Vigouroux has prepared a silicide of manganese by heating silicon and manganese in an electric furnace, and has found that the new compound takes fire at a red heat, and that superheated steam destroys 16.

LIST OF REFINERS AND SMELTERS.

COPPER.

London—
Broughton Copper Company (Limited), 122, Cannon Street, M.C.
Crispia and Co., Marshgate Lune, Stratford, H.
English and Australian Copper Company (Limited) (W. R. Caldwell Moors,
secretary), 136 and 137, Paimerston Buildings, E.C.
Lambert, Charles and Co., Leadenhall Buildings, E.C.
Mevill, Druce and Co., 14, King William Street, R.C.
Rio Tinto Company (Limited) (George N. Thomson, secretary), 39 and 31, 8s.
Swithin's Lane, E.C.
Sheffield Smelting Company (Limited) (Chomas H. Murton, London munager),
1, Berry Street, Clerkeswell Road, E.C.
Vivian And Sons, 3A, Bond Court, Walbrook, E.C., and Limehouse Hols,
Emmett Street, E.
Vivian, H. H. and Co., 18, Laurence Pountney Lane, E.C.
Williams, Foster and Co., and Pascoe Grenfell and Sons (Limited), Leadenhall
Buildings, E.C., and 17, Upper Thames Street, E.C.
Country—

Vivian, H. H. and Co., 18, Luarence Pountney Lane, R.C. Williams, Foster and Co., and Pascoe Grenfell and Sons (Limited), Leadenbull Buildings, E.C., and 27, Upper Thames Street, E.C. Country—Baster, Henry (John Ingram, agent), 20, Eavy Row, Bicmingham, Baster, Henry, Part Copper Works, St. Helens, Lancashire.
Baster, Henry, Part Copper Works, St. Helens, Lancashire.
Baster Henry, Part Copper Works, St. Helens, Lancashire.
Bede Metal and Chemical Company (Limited) (W. M. Brown, secretary);
Works—Hebburn, R.S.O., Durham.
Bibby, John, Sons and Co., Garston Copper Works, Garston; Liverpool and Eavenhead Works, St. Helens.
Blotton, Thomas and Sons, Proghall Copper Works, Proghall, Stoke, Staffordshire; Mersey Copper Works, Widnes, Lancashire, and 18, Broad Street, Birmingham.

Birmingham.
ughton Copper Company (Limited), Broughton Copper Works, Manchester,
e Copper Company (Limited), Briton Ferry Copper Works, Briton Ferry,
Glamorganshire.
nis. J. H., and Co., Cornubia Works, Widnes, Luncashire, and 3, Castle

Street, Liverpool.

Bliott's Metal Company (L'mited), Pembrey Copper Works, Burry Port, B. 50, 8. Wales: 23, Columner R. w and Selly Oak Works, Burry Port, B. 50, 8. Wales: 23, Columner R. w and Selly Oak Works, Birmingham; 9, Irwell Street, Liverpool, and 14, Brown Street, Manchester.

Elmore's Patent Copper Depositing Company (Limited) (James Sturms, escretary), Fontefract Road, Hundes, Leods.

Glasgow Metal Refining Company (John Shields, proprietor), 24%, King Street, S. S. Glasgow.

8.8. Giasgow. Rills, Henry and Son, Amlwich, Port Almwich, R.S.O., North Wales. Rills, Henry and Son, Anglescy Copper Works, Low Walker, R.S.O., North-

umberland. Lambert, Charles and Co., Port Tennant Copper Works, Swanses, Landore Copper Company (Limited), Landore, R.S.O., South Wales, Liverpool Silver and Copper Company (Limited) (Tuc), Wort Bank, Widnes, Lancashies.

Lincoshire.

Logan and Co., Sirkenhead Dock Copper Wharf, Birkenhead.

Logan and Co., Sirkenhead Dock Copper Wharf, Birkenhead.

Mackinlay, R. W. and Son, 110, Great Wellington Street, Einning Park, Glasgow.

Mason and Barry, Waltsend, R.S.Q., Northumberland.

Mona Mining Company (Thomas Fanning Evans, proprietor), Almwich, R.S.O.,

as Mining Company (Thousas Fanning Evans, proprietor), Almwich, R.S.O., Anglesey, North Wales, orris and Co., 12, Priory Place, Doncaster; works, Stockwith-on-Trent, Gainsbrough. (Priory Place, Doncaster; works, Stockwith-on-Trent, Ill, Druce, and Co., Lianelly, South Wales and 24, Exchange Alley, Livernool. Mor

vill, Druce, and Co., Lianelly, South Wales and 7s, Exchange Ausy, Liverpool.

Witon, Keates and Co. (agent John A. Fielding), Central Copper office, s, whitworth Street, Lindon Road, Manchester; 18, King Street, and 3, Copper Row, Liverpool; Sutton, 8t, Helen's Greenfield, Holywell, Morth Wales, and Broad Street, Birmingham.

8, C. and Son, Bedminster Smelting Works, Mill Line, Bristol.

o Tinto Company, Limited (G. S. Thomson, sourstary), Grange Metal Works, Jarrow-on-Tyne and Cwmavon, Port Taibos, Giamorganshirs.

berts, William, Brookland Cupper Works, St. Helens, Lancashire.

Helens Copper Company, Limited (William J. Thomson, mans 197), Old Revenhead Works, St Helens.

sphead, James, Black Vale Copper and Tin Smelting Works, Swaness, sarsis Sulphur and Copper Company (timited), Hebbarn, R.S.O., Darham; Lougdale Road, Widnes, Lunoashire; Esst Moors, Ordiff; 79, Colmore Row, Birmingham; registered offices (David Barlas, secretary), 135, West George Street, Glasgow.

Lugadale Road, Widnes, Lindberg (David Barlas, secretary), 155, West George Birmingham; registered offices (David Barlas, secretary), 155, West George Street, Glasgow.
dan and Sons, Hafud Works, Swansea; Morgam Copper Works, Port Taitot,
South Wales; 2, Catheart Street, Greenock; 70, Prince Street, Bristel;
7, St. Feter's Square, Manchester; 4, Crooked Lune, Liverpool, and 45, George
Street-Parade, Birmingham.
Blace(John), Sons and Mappiebeck (Limited), Abberley Street, Birmingham,
Blace(John), Sons and Mappiebeck (Limited), Abberley Street, Birmingham,
History and Co., and Gregotell Pascoe and Sons (Limited), 17, Irwell
Ohambery, Liverpool; works, Morfa Copper Works, Landore, Swanses,
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Ireland — Vivian and Sons, 68, Lower Gardiner Street, Dublin,

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Vivian and Sons, 88, Lower Gardiner Street, Dublin,
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London—
Clark, Frederick A. and Son, Phoenix Lead Mills, Mariborough Whart
Hammersmith, W.
Rothoven, Henry John and Sons, 17, Gracechurch Street, E.O., and Upper
Ordonac Wharf, Rotherhithe Street, S.B.
Lane, Sons and Co. (Limited), Old Shot Tower Works, Commercial Boad,
Lambeth, S.B.
Revill, Druce and Co., 74, King William Street, E.O.
Watney, S. O. and Co., Billiter Buildings, E.O., and SS, West Ferry Boad, E.
Ocuntry—
A. D. Mining Company, Limited (Simon Cherry, agent), Fremington, Richmond, Yorks.
Alialine Reduction Syndicate, Limited (Thie), Hebburn, B.S.O., Durham,
Cockhill and Sunnyside Lead Mines (Hutchinson and Williams proprietors),
Pateley Bridge, Leeds.
Cookson and Co.; works, Willington Gray, R.S.O., Northumberfand, and Sank
Chambers, Sandhill, Newcastle-on-Syns.
Liansamlet Smelting Company (Limited), Liansamlet, Swanses.
Lock, Blackett and Co., Wallisand, R.S.O., Northumberfand, and Sank
Condon Lead Company (Limited) (Thomas Stoddart, manager), Egglestons,
Darlington, and (John Joseph Millican, manager) Middiston-in-Tesedale,
Darlington, and Maitby, manager), Great Hooking, Stoddart, manager), Egglestons,
Darlington, and Smelting Company (J. R. Wostenholme, sceresary,
Leonard Maitby, manager), Great Hooking, Smelled.
Moore, J. H., Brough Works, Hope, Gheeffield), Derbysnire.
Revill, Druce and Co., Lianelly, South Wales, and 24, Exchange Alley, LiverSool.

9001, North Wales Lead Works (Limited), Mann Island, Liverpool, and at Holywell,

Both Waies Lead Works (Limited), Mann Island, Liverpool, and at noisymu, Flintshire.

Pather Lead Smelting Company (Limited) (James B. Clark, manager), Avas Street, St. Philip's, Bristol.

Fats, O. and Son, Bedmineter Smelting Works, Mill Lame, Bristol.

Quirk, Barton, and Burns, Smelting Works, Mill Lame, Bristol.

Quirk, Barton, and Burns, Smelting Works, St. Helens and Orange Court, Oastle Street, Liverpool.

St. Outhbert Lead Smelting Works (Thomas Williows, manager), Priddy, Weils, Somersel.

Scargill Lead Mining and Smelting Company (Limited), 15, Westgate Road, Hewestle-on-Tyne, and Songrif (Batrand Castley, Norks.

Sheldon Bush and Patent Shot Company, Oraw's H. 16, 55. George, Bristel, and Cheese Lane, St. Philips, Bristol.

Stephens, James, Black Vais Copper and Tin Smelting Works, Swansel.

Steney Groves Company (David Williams, manager), Pateley Bridge, Leeds.

Greenook.

Stephans, James, David Williams, manager, and 3, Cathoars Briver, Greencok.

Vivian and Sons, 7, St. Peter Square, Manchester, and 3, Cathoars Briver, Greencok.

Walkers, Parker and Co., (Limited), Baylit Lead Works, Baglit, Hofywil, Borth Wales; Lead Works, Obester, and 6, Mann Island, Liverpool.

Walson, Robert, Stanhope House, Stanhope, Darlington.

Wass and Son (trustees of) (John Miers, manager of smelting works), isl.

Cromford, Derby, and (Anthony M. Alsop, agent), South Darley, Maliock Bath, Derbyshir, Waster, Maliock Bath, Derbyshir, Waster, Maliock Bath, Brown M., Forbiergill, manager), Alien Smelting Mill, and Newcastle Mins, Alfebaste, Allondsie, S.S.O., Northumberland.

Wasrdale Lead Company (Limited), Killhope and Sedling, Cowshill and Synthope, Darlington.

Teathfield Smelting Works, Pateley Bridge.

hops, Darlington. Tork, Thomas Ed., Heathfield Smelting Works, Pateley Bridge. Ireland— MacLachian and Ross, Abercorn Basto, Belfast,

Bolitho, Thomas and William, 39, Lombard Street, E.C.

Bast Tregembo Mine, 3 Great Queen Street, S.W.

Bedrath Tin Smelting Company, Golden Heart Wharf, Dowgate, B.C.

Company

Country on Soliting Company (Limited), The (Thomas Wiffis Figure 1) and Carvedrai, True managing director), Ohyandour, Trereife, Pousance, and Carvedrai, Truernish Tin Smelting Company (Alfred Lanyon, acting partner), Hedra Cornwall.

Royal J. G. and T. (agents), Leeds Old Lead Works, North Street, Leeds Horn, W. P. and Co., 75, 51, and 53, Lawley Street, Birmingham.

Pass, C. and Son, Bedminster Smelting Works, Mill Lane, Briton.

Pass, C. in Smelling Company (Limisch). Thomas Tasque, manager, Die.

E.S.O. COTTAIN, and Liverpool,
Liverpool,
Poolton, Richard, 55%, Hurst Street, Birmingham.
Redruth Tin Smelting Company, Redruth, Cornwall:
Stephens, James, Bisck Vale Copper and Tin Smelting Works, Swanss',
Sutton, Thomas B. and Sons, Keath, South Waies.
Tamar Tin Smelting Company (Limited), J. F. Pagen, managing discions, I, Courtensy Street, Flymouth,
Williams, Harvey and Co., Mellanear, Rayle, Cornwall.

London— olden and Co., 5, Wood Street, Westminster, 5, W., Giller and Co. (late H. Seeger), fl. Mincing Lans, M.O., orweglam Zino Company, Limited (Charles G. Hellini', storets y), 44, Greenam Street, B.O.

Country— entral Motal and Smelting Company, 16, Carrick Street, Glasgow, illiwyn and Co., Swanses. Dilleyn and Co., Swanses.

English Crown Spelter Company, Port Tennant, Swanses.

Rentheed and Tynedais Lead and Zine Company (Limited); 'effices: 4, St.,

Richolas Buildings, Newassite-on-Tyne.

Scott, F. B., B. and Son, 67, Victorits Street, Liverpool.

Vale Spelter Company, Swanses.

Vicilie Montague Z'ne Company; office and warehouse, 67, Vic oris Street.

Liverpool.

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Villers Spetter Company Limited (Thomas Freeman, managing director). Bannes.
Virlan and Sons, Morriston Spelter Works, Swanses.
William Foster and Co., Swanses.
ANTIMONY.

London Fry, Norway Wharf, 202, Rotherhithe Street, B.E. Johnson, Matthey and Oo. (Limited), Hatton Garden, E.C. Johnson, Matthey and Oo. (Limited), Hatton Garden, E.C. Buildings, E.C. Buildings, E.C. Merton, Hr. B. and Co. (merchants), 2, Metal Exchange Buildings, E.C. Morrlson, Ketewich strict Co., 70, Graccohurch Street, E.C.; antimony dealers and importers.

Pratt, J. J. and Son, 75, Queen Street, E.C., and 305, Kingsland Road, N.E. Smith, Alexander (Gealer), 5, Holborn Circus, E.C. Wright-Barton, E. W. and Co., 355, St. Leonard's Boad, Bromley, E. County.

wrights of the Chambers, Sandhill, Newcastle-on-Tyne; works, Wellington Quay, Newcastle-on-Tyne.

NICKEL AND COBALT.

II. II. Vivian and Co. (Limited), Syansea.

Hy. Wiggin and Co. (Limited), Birmingbam.

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

ALADDIN'S LAMP. —Cablegram from the mines:—"Four weeks' return totals 434 ounces of gold, approximate value, £1590—namely, 146 tons of ore have been crushed, yielding 315 ounces, and 3 tons rich crude ore have been shipped, containing 119 ounces. Our mill has been shut down for 9 days for repairs during this period." The directors have declared an interim dividend of 1s. per share free of incomedax, payable on February 13. The transfer books will be closed from February 5 to 13 inclusive.

AFRICAN ALLUVIAL.—Cablegram from the superintendent engineer, Mr. Niness, received January 25:—"Owing to searcity of native miners and the rain, washing for gold has been delayed. Have procured some natives from Commandant. Commence as soon as possible washing for gold. Success may be considered certain."

be considered certain. be considered certain."

ACHILLES.—Cablegram received yesterday from the managing director at the mine:—"Banked yesterday 214 ounces (gold). Mine is getting into rich ore. Am confident that the mine will prove a good dividend-paying concern."

BAKER'S CREEK.—Result of crushing for the fortnight ended January 27, 670 ounces retorted gold.

BAYLEY'S REWARD NO. 1 SOUTH.—The following cable, lated the 28th instant, has been received by this company.

dated the 28th instant, has been received by this company's London office from its head office in Melbourne:—"121 ounces,

London office from its head office in Melbourne:—"121 ounces, 150 tons, one month."

BRILLIANT BLOCK.—The directors have received the following cablegram from the head office in Charters Towers:—"Have crushed during the month 2105 tons of quartz for 1296 ounces of gold. The profit on the run is £774. The approximate value of the above return is £4500."

BROKEN HILL PROPRIETARY.—The manager reports that a cable has been received from their head office in Melbourne stating that the general meeting was held, and passed off satisfactorily, the directors being re-elected, and a dividend of 1s. per share was declared payable on February 19, the books for which will be made up on the morning of the 5th of that month. The extraordinary general meeting was also held, at which the resolution altering Article 104, giving power to the directors to purchase properties up to £25,000, was passed.

BROKEN HILL PROPRIETARY—The manager reports that for the week ending January 30,6557 tons of ore were treated, yielding 508 tons treated by amalgamating and leaching plants, producing 7181 ounces silver. The price of the shares in Melbourne is £3 3s. 6d.

BROWN HILL EXTENDED.—The following cable, dated

bourne is 23 3s. 6d.

BROWN HILL EXTENDED.—The following cable, dated the 29th inst., has been received from the business manager, Mr. E. G. Price:—"Brown Hill Extended in sinking for Brown Hill lode, which we expect reaching at a depth of 175 feet, have struck at a depth of 95 feet lode formation 3 feet in width,

carrying gold."

CRESCENT GOLD.—The directors have received the following telegram, dated January 30, giving the result of the last crushing, as follows:—"Victory Mine, 26 tons crushed, produced 82 ounces gold."

COLUMBIA (Charters Towers).—The following cablegram has peen received from the managers at the mine:—"Depth of shaft 75 foet. Temporary machinery erected ready for work. This will enable us to maintain better speed in future."

CONSOLIDATED MURCHISON.—The following cable has been received:—"Crushed 710 tons; obtained 291 ounces of gold."

DAY DAWN P.C.—A cablegram received from the manager at Charters Towersstates:—"40 tons, estimated quality 11 ounce

per ton."

DAY DAWN BLOCK AND WYNDHAM.—The directors have received the following cablegram from the general manager at Charters Towers, giving the result of the crushing for the fortnight ending the 25th instant:—"Tons crushed, 1090; yield of gold, 1075 cunces; approximate value, £3715; fortnight's expenses, £1860. The reef in the company's No. 2 underlie shaft is 8 feet thick, worth 1 cance per ton."

GELDENHUIS DEEP.—Mr. H. C. Perkins reports the December crushings as follows:—"100 stamps ran for 21 days; crushed 9142 tons; about 7000 tons from mine and 2142 tons from dumps. Gold from mill, 1839 cances; from cyanide works, 1351 cances; total, 3190 cances; value, £10,500. Tons treated

1351 ounces; total, 3190 ounces; value, £10,500. Tonstreated by evanide process, 6860 tons."

GEM OF CUE.—Cablegram from the company's manager:—
"Have struck a rich body of ore, water level; now driving on

GLENROCK CONSOLIDATED.—Latest mail advices received in the company's manager's (in Coolgardie) report:—
"Hampton Plains Estates. Prospecting on the Hampton Plains Estates is going on regularly. Three reefs have been discovered. I am having assays made from extracted samples, and have started a shaft on the strongest of the three reefs—one that can be traced helf a mile on surface. This shaft will one that can be traced half a mile on surface. This shaft will

GOLDEN PLUM CONSOLIDATED. -The secretary writes : "A telegram having been sent to Coolgardie to know if crushing was commenced, a reply has been received that they will not commence until the last week in February, one other boiler having yet to be set. The directors assume that the local management during the absence of the missing parts are com-pleting the battery for its full power, instead of starting this month with five stamps, and having to should a starting this with five stamps, and having to shortly stop to make the

BOULDER PROPRIETARY. - The GREAT BOULDER PROPRIETARY. — The secre-fary advises, in connection with rumours that a cable had been received announcing a claim being made on the property, which, in the absence of particulars, was considered by the directors to be frivolous; and, in reply to an inquiry, the manager cables that the case will be heard on February 5, but the company's lawyers do not see any cause for alarm. ISLE OF MAN.—The secretary has seld 100 tons of this sompany's ore at 23 7s. 6d. per ton.

HALL MINES .- The directors inform us that the following information has been received from the works at Nelson:—
"For the week ending Saturday, January 25, at noon, 720 tons of ore were smelted, producing 58 tons of mattee, assaying: copper, 50 cent.: silver, 287 ounces; gold, showing traces per ton of 2000 lbs."

ton of 2000 lbs."

IMPERIAL WESTERN AUSTRALIAN CORPORATION.

—Mail advices from Perth, W.A., state that Mr. A. F. Calvert has secured the Mainland East, adjoining the Mainland Consols, Lake Austin, for a satisfactory figure. The reefs are about three in number, one in particular, dipping towards the lake, being up to a depth on the lode of 75 feet, with a large amount of driving and some stoping already done. Many hundreds of ounces of alluvial were picked up a year or two ago on this property, which was then known as the sensation. The area comprises 21 acres of ground.

MYSORE-WYNAAD CONSOLIDATED. — This company has sold the gold obtained in November (706 ounces) for £2703 7s.

MYSORE-WYNAAD CONSOLIDATED. — This company has sold the gold obtained in November (706 ounces) for £2703 7s. MOSMAN GOLD MINES.—The directors have received the following cablegram from Charters Towers:—"Wyndham reef. The winze from the 14 level north is down 117 feet. The reef is 2 feet wide, and I have crushed 3 tons (an average sample taken from the dump) which has yielded 4 ounces of gold per ten. The principal part of the gold is in the pyrites." NERBUDDA COAL AND IRON.—The sales of coal for the month of December last are 3100 tons.

month of December last are 3100 tons, NORTH QUEENSLAND MINES AGENCY,—The L ndon NORTH QUEENSLAND MINES AGENCY.—The L'indon agents (Messrs. Stormont and Todd) of the North Queensland Mines Agency (Limited) announce that they have received cable communications from the directors in Brisbane, in reply to the cables sent by them, the Trustees and the Shareholders' Committee, to the following effect:—"The funds set apart for dividend at the rate of 30 per cent. have, through an error, been applied in another direction. In view of the dissatisfaction applied in another direction. In view of the dissatisfaction expressed by the English shareholders at the proposed payment of dividend in shares of the Carlyle Gold Mines (Limited), the directors of the North Queensland Mines Agency have decided to leave immediately for London in order to meet the English

directors of the North Queensland Mines Agency have decided to leave immediately for London in order to meet the English shareholders. They will then arrange interim dividend for the half-year to be paid in cash." In consequence of this notice the transfer books will remain open until further notice is given, and the announcement of dividend made by us on the 22nd inst. is hereby cancelled, pending arrival of directors, of which due notification will be given.

QUEEN CROSS REEF.—The directors have received the following cablegram, dated January 24:—"Have cleaned up after crushing 184 tons of quartz for a yield of 475 ounces gold."

RANDT GOLD.—Extract of letter received from the consulting and mining engineer, dated January 6:—"The battle with Jameson was fought over our ground. The manager and his wife could not get through, and during the firing went down the adjoining Violet shaft. One of our white employés got through and again visited Krugersdorp, and got back again here, and says our buildings, &c., are quite safe and uninjured."

ST. JOHN DEL REY.—Telegram from Mr. Chalmers:—"Produce 10 days second division January, 10,000 citavas, equal to 1152*8374 ounce troy; value £3875. Yield per ton, 5.8 oit was (0.6685 ounce troy)."

UNITED PIONEER.—The following cable information received from the manager:—"Lower level adit completed. Reef 2 feet wide, assaying 2 ounce. Resume crushing beginning February."

WEST AUSTRALIAN TRADING AND EXPLORATION.

WEST AUSTRALIAN TRADING AND EXPLORATION. WEST AUSTRALIAN TRADING AND EXPLORATION.—The following cables have been received from the manager of the following mines in the Black Flag district:—"Black Flag Consols. Main shaft 90 feet driven 25 feet to underlie shaft for ventilation; water is making in main shaft; sinking through ironstone and quartz veins carrying gold.—Black Flag Consols east. Reef at surface 6 feet wide; sunk main shaft 20 feet; expect to cut reef at 30 feet; good prospects by dollying; work very encouraging. Since new rich find in district land taken up in all directions."

wery encouraging.
in all directions."
WESTRALIA.—The following cablegram has been received from Perth, W.A.:—Splendid specimens of stens from the 60 and 105 feet levels of the Lone Hand Mine at the 25 mile have

from Perth, W.A.:—Splendid specimens of stens from the 60 and 105 feet levels of the Lone Hand Mine at the 25 mile have been brought into Coolgardie, creating a great sensation there."

WAIHI GRAND JUNCTION.—By cable advices, 29th inst., the manager reports:—"Grand Junction engine shaft is down 187 feet. West Waihi prospecting shaft crosscut driven 20 feet in highly mineralised stone." By mail advices, December 28, the local management report that work would be stopped during the holidays. They have appointed Mr. J. H. Evans as their mine manager, strongly recommended to them by Professor Black, and otherwise possessed of good testimonials.

WHEELER HILL.—The following is a copy of cable received from Professor Geo. A. Treadwell:—"Struck large body sulphuret ore, \$6 gold and 4 cunces silver per ton."

ZAPOPAN MINES.—A cable has been received from the manager at the mines, as follows:—"Mill working splendidly, working day and night. Underground workings satisfactory; an average sample of pyrites main drift assays 28 dwts. (nearly 13 ounces), No. 3 lode 19 dwts.; have cut a vein in winze, payable slate formation 3 feet in width, good fine gold."

ZEEHAN-MONTANA.—The following cablegram has been received from Hobart, dated 30th inst.:—"Shipped per ss. Oldenburg 145 tons silver lead ore, containing about 102 tons lead and 13,050 ounces silver."

THE JOHANNESBURG GOLD FIELDS.

A circular to the shareholders states that the new company formed to work the Ziervogel property has been registered in the Transvaal under the name of "Cinderella Deep (Limited)," the name of the "East Rand Deep (Limited)" having already been appropriated. The payment of £10,000 in cash for the Bethlehem claims has been received, and the company's available cash recovers now amount to over £12,000 amoly sufficients. able cash resources now amount to over £12,000, amply sufficient to meet all current liabilities, including the obligations of the company under their tree planting agreements. Reports recently received from managers of neighbouring properties are such as to encourage the hope that prospecting on the ground will lead to favourable results.

HAWK'S VIEW.—The following fortnightly report has been received from the mine dated December 17; Hawk's View. I have just let a contract for sinking the main shaft on the Missing Link heas 200 feet. Contractors started work to-day. I expect rapid progress. The main shaft we are sinking will serve the purpose of commanding the reefs in the Missing Link lease, white at the same time it will help to solve the problem as to whether the country holds any considerable quantities of water. It is sunk in the most favourable position I could select, on the edge of one of the few creek beds in the country, and is located on a large flat, the rock of which has been decomposed to a considerable depth. The ordinary propecting work is stopped in the mine, the energies of the management now being concentrated on the main shaft.

shaft.
TORATEA OF HAURAKI.—Report from Captain Hodge, December 27: The winze below No. 7 level continues to improve with depth, now down 45 feet, Have on hand about 78 lbs. of picked stone, worth about 14 ounce to the pound. I intend to start a level at a depth of 55 feet to test the average value of the rest. We are proving a good reef, and if developments warrant it, which i have no reason to doubt, we must erect proper machinery and engage! mining is earnest. I am adapting someof our machinery so that we need not stop developments below the No. 7 level. The reef in the western side of the hill is a good looking lode 8 inches wide and might show gold at any moment. The orosecut driving west for new roef is now in a compact mineralised rook and the water percolation indicates that we are nearing the reef. The contrastors have delivered a large stock of mining timber.

COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

BUSHMAN'S GOLD MINES OF WESTERN AUSTRALIA.

BUSHMAN'S GOLD MINES OF WESTERN

AUSTRALIA.

The secretary has issued the following circular letter to the shareholders:—"Mr. John Howell, who promised to make an examination and report on the company's property, writes under data December 2 last: 'I do not feel myself able to go at present;' but he hopes to be able to do so in March. He states, however, he sent for Mr. Marsh (the manager) to see him. Mr. Marsh has sent a report, from which the following extracts are taken, as indicating the direction in which it is the intention of the board to direct attention for the future development of the property. Mr. Marsh says:—On Block 728, Birthday Reel, I should also advise that the 12 feet shaft at (b) should follow the reef down as deep as conveniently possible. This would give us information as to the dip of the gold-bearing stone, and also, probably, the character of the earth movements. The shaft might afterwards be useful as an air or mullock shaft. At (c) a cross east and west reef, about 18 inches thick, has been opened by a hole about 4 feet deep. The stone broken from this reef is worth I ounce to 2 ounces per ton. This reef runs into and forms a junction with a north and south body of stone about 3 feet thick of low grade quality at the surface. The stone in the small cross reef is sufficiently promising to warrant the sinking of a shaft to follow down the junction of the two reefs, where some good gold-bearing stone-should be met with. At (f) there is a small reef ranging from a few inchesto 2 feet wide of very consistent gold-bearing character. I think any portion of this reef will pay where there is sufficient stone to work. The reef runs parallel with the eastern boundary of the claim. It is traceable at the surface for a length of about 1000 feet, though in many places very small. The largest bodies of stone occur near the two ends, where in each place a prospecting shaft has been put down to about 14 feet, producing stone of a payable character. I should advise the continuation of these shafts foll

THE FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.

The directors have received advices from the mines, dated November 24 and December 10. Also letters from Messrs. Restrepo, dated November 12 and December 12. The statement for the month of November is as follows:—3796 tons produced (bullion) 3022 ounces, tributers' gold produced (bullion) 194 ounces, equal 3216 ounces; also 80,850 lbs. of sulphurets, valued at £631 4s. 4d. Estimated value of the gold and sulphurets, £7943 7s. 4d.; cost at the mines, Medellin, and in London, £6541 10s.; estimated excess of returns, £1401 17s. 4d.

LONE HAND GOLD MINES (LIMITED)

LONE HAND GOLD MINES (LIMITED).

The statutory general meeting of shareholders in the Lone Hand Gold Mines (Limited) took place on Tuesday, at Winehester House, E.C.—Mr. John Wallace, who presided, said that the company's property was situated in what is known as the "25-Mile," which was a richly auriferous district, about that distance from the township of Coolgardie. When the prospectus was issued the property consisted of 30 acres, being leases 441, 498, and 238, known respectively by the names of the Lone Hand, the Sunbeam, and the Troe Blue, but the company had since then taken up 6 acres adjoining the Lone Hand, without any additional cost, thus making their holding 36 acres in all. The contract for providing the machinery necessary for the mine was given to Messrs. Fraser and Chalmers, and the heaviest portion, consisting of boilers, engine, and battery, was shipped by the December steamer. The machinery consisted of a mill, or battery, of 20 stamps, with engine and four boilers, capable of driving 30 stamps, and all the necessary adjuncts of stone-breaker, automatic feeders, &c., &c., which would enable us to work the mill with economy.—The directors bad, so far, worked diligently in the interests of the company, and he hoped the results would ultimately be satisfactory.—A vote of thanks to the Chairman terminated the proceedings.

— An extraordinary general meeting of the Witwatershandr

— An extraordinary general meeting of the Witwatershandt Gold Mining Company, Limited (Knight's), will be held in Johannesburg, on Thursday, March 12, to consider a proposal to increase the capital of the company to £325,000 = 75,000 additional shares, to be dealt with as follows:—62,500 shares to be offered to shareholders pro rata at £4 per share. 12,000 shares to be held in reserve. Total, 75,000 shares.

— The Exploration Company (Limited) notifies that warrants for 1, 5, 10, and 25 shares fully-paid in the Rose Deer (Limited) are now ready to be exchanged for registered certificates. Applications for the exchange must be made on the company's form, obtainable only at the offices of the London Agency, 30, St. Swithin's-lane, or at the Paris Agency, 20, Rue Taitbout, Paris, accompanied by the necessary fees.

- A dividend of £25,000, being 6d. a share for the month of January, is payable on February 1 in MOUNT MORGAN GOLD MINING COMPANY (LIMITED).

- The first batch of letters of allotment in the VICTORIA REEF GOLD MINES has been posted.

- We are officially informed that Mr. E. C. Hames, of Mosers. Hames, Bachelor, and Co., 110, Cannon-street, E.C., has joined the board of the MOUNT PROPHESY AND PER-SEVERANCE GOLD MINES (LIMITED).

WESTRALIA (LIMITED) .- Mr. G. B. Mee, the Chairman of Hannan's North Gold Mining Company (Limited), and Mr. James Doyle, managing director of the West Australian Mining Company (Limited), have joined the Board of Westralia (Limited).

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lai th W

C. PASS & SON (Limited), BRISTOL,

LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c. and DROSS or ORES containing

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HENRY WIGGIN & CO. (Limited), WICKEL AND COBALT REFINERS MAKERS OF BEST RED LEAD FOR FLINT GLASS MANUFACTURERS.

BIRMINGHAM.

J. A. JONES, Mining Engineer,

(M.Inst.M.M., M.N.Eng.Inst.M.M.E.)

GIJON (ASTURIAS), SPAIN.

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RAILS .- Bridge, Flange, Double Head, and Bull Head, with or without fastenings.

SLEEPERS .- Wood and Steel for all gauges.

I.OCOMOTIVES.—Six wheels coupled, by Manning, Wardle and Co., 12 inches by 17 inches, now at Cardiff; also six wheels coupled, by Avonside Engine Company, 14 inches by 20 inches, now near Cardiff; also six wheels coupled, by Sbarp, Stewart, and Co., 17 inches by 24 inches, now near Cardiff; all recently thoroughly overhauled, and ready for instant work; cheap for cash, or three years' redemption purchase.

COMPANIES AND LEGAL ANNOUNCEMENTS.

dvertisements are inserted in this column at the rate of 9d. per line, with a minimum charge of 7s. 6d.

THE OURO PRETO GOLD MINES OF BRAZIL (LIMITED)

> 6, Queen Street Place Londor, E.C., 29th January, 1896.

AT a MEETING of the DIRECTORS, held on the 28th inst.,

A T a MEETING of the DIRBOTORS,

"That an Interim Dividend of 1s, per share (free of Income
Tax) be and is hereby declared, payable on the 15th day of
February, 1896, to the Shareholders on the books of the Company on the 31st January instant, and that the Transfer Books
be closed during the said 31st January."

By order of the Board,

HENBY WARD,

Secretary.

N.B.—Holders of Share Warrants must leave Coupon No. 2 at the Company's Office three days for examination.

THE INDIAN and EASTERN ENGINEER.

ILLUSTRATED WEEKLY JOURNAL

ENGINEERS IN INDIA AND THE EAST.

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DIARY.

Monday, February 3. Monday, February 3.

Komata Reefs Gold Mining, Winchester House, 12.

St. George's Arrow Mine, Winchester House, 12.

Thomas (West Australian) Syndicate, Winchester House, 12.

Black Flag Consolidated, Winchester House, 12.30.

Waitekauri Extended, Limited, Winchester House, 1.

Mount Margaret Gold, Cannon-street Hotel, 2.

Mallina Gold Mine, Limited, Glasgow, 3.

Great Boulder Perseverance Gold, Winchester House, 3.

Tuesday, February 4. Shahzada Mines, Limited, Winchester House, 11. Scotty's Hauraki Gold, Winchester House, 12. Waihi Silverton Extended, Cannon-street Hotel, 12.

Wednesday, February 5.
Kinsella Gold Mines, Winchester House, 12.
Tokatea of Hauraki, Winchester House, 12.
Blue Spur and Gabriel's Gully, Winchester House, 12.
Bultfontein Sun Diamond, Winchester House, 1. Victor-Waihou Gold Mining, Winchester House, 1. General Assets Purchase, Winchester House, 2.30. Transvaal Consolidated Land, Pretoria, 3.

Thursday, February 6. Wheal Grenville, 7, Union Court, E.C., 11.
Royal Oak of Hauraki, Winchester House, 1.
Anglo-Westralian (general) Winchester House, 2.30.
Dinner to Mr. F. Nicolas, F.R.G.S., Holborn Rest., 7.30.

Friday, February 7.
Western Transvaal Development, Throgmorton House, 12.

Saturday, February 9.
Sust in Time Gold Mines, Winchester House, 12

The Illining Yournal, RAILWAY AND COMMERCIAL GAZETTE:

An Illustrated Record of Mining, Metallurgical, Railway, Financial, Industrial, and Engineering Progress.

ESTABLISHED IN 1835.

THE MINING JOURNAL, RAILWAY AND COMMERCIAL GAZETTE, published every SATURDAY MORNING, price SIXPENCE, is recognised throughout the World as being the oldest, most influential, and most widely circulated Journal devoted to the interests which it represents. It circulates ALL OVER THE WORLD, Amongst Mine Owners, Capitalists, Investors, Mining, Metallurgical Engineers, Manufacturers, &c., &c.

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TO CORRESPONDENTS.—Letters on Editorial Matters, or containing literary contributions should be addressed to "The Editorial" All matter intended for insertion must be written on one side of the paper only. The return of rejected manuscripts cannot be guaranteed. The Editor invites correspondence and items of news or information from readers in all parts of the Markit.

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ADV ERTISERS.—The following is an abbreviated Scale of Charges for divertising: — Companies' Prospectuses, £12 12s. per column, or £20 ser page; Companies' or Legal Annonnesments, \$d, per line, with a Minimum charge of 7s. \$d; Sales by Auction, Publications, For Sale, Wanted, &, &c., &c. per line with a Minimum charge of 4s.
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had on application.

ADVERTISEMENTS (which should in all cases be sent direct to THE BUSINESS MANAGER: can now be received for the forthcoming issue of THE MINING JOURNAL, RAILWAY AND COMMERCIAL GAZETTE, on FILDAY, at 18, FINCH LANG. E.C., up till 6 p.m., and at 3, DORSET BUILDINGS. SALISBURY SQUARE, E.O. until 9 p.m.

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Codes used: "A.B.C.," Moreing's, and "Universal."

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LONDON: FEBRUARY 1, 1896.

THE COLLIERY DISASTER IN SOUTH WALES.

YE regret that before the New Year is even a month old we should already be called upon to commence the black list of serious mine accidents. The feeling of security engendered by the comparative immunity of the past year from such casualties has been rudely dissipated, and any disposition that we might have had to take credit for the small death bill of 1895 as an advance in scientific mining engineering has been effectually counteracted. This latest disaster occurred on Monday morning, January 27, at one of the collieries owned by David Davis and Sons (Limited), of Ferndale, in the Rhondda Fawr Valley, the official designation of the pits being Ferndale Nos. 6, 7, and 8, situated at Taylorstown. These form part of an extensive colliery system operated by the same tant. In the three pits in ques which seems to have been used as a main up-cast shaft, whilst the two others were used as down-cast, for winding, &c., there appear to have been close upon 1200 men employed underground. It is a fortunate circumstance that the accident occurred when it did-namely, before six o'clock in the morning-so that none of the men in the foreshift had yet gone down, and there were comparatively few men in the mine, probably only firemen, timbermen, stonemen enginemen, &c., who were engaged in preparing the pit, and having everything in readiness for the shift that was about to go down. As far as is known, there seem to have been 89 men underground in the three pits, and of this number 32 seem to deal injured by the effects of the explosion and of the after-damp.

directed, is the saving of one man who was found alive in one of the workings 15 hours after the explosion, whilst five other men were found dead in the same place, although their lamps were still burning. Professor Clowes has shown recently that the average composition of air in which a lamp flame will be extinguished is about

Oxygen .. 16½ per cent. Nitrogen .. 108 Carbonic acid 3

whilst six containing only 10 per cent. of oxygen, and considerably over 3 per cent. of carbonic acid, can be breathed for some time with impunity; in other words, men can breathe and live in air which would immediately extinguish a lamp. Yet, in this instance, several lamps continued to burn for many hours in an atmosphere that seems to have killed these five unfortunate men, whilst, stranger still, one man survived the poisonous effects of the after-damp, in spite of his long exposure to it. This appears to us a matter that deserves a most thorough investigation. It seems pretty clear that these poor fellows could not have been killed by the direct force of the explosion, which would assuredly have extinguished their lamps if nothing more it is possible that they fell victims to the direct poisonous action of carbonic oxide, which must be produced in large quantities, especially in a coal dust explosion, but it is most important to find out, if possible, what was the difference in relative position or in other circumstances between the men who succumbed and the one who survived. There is no saying but that information of high value may be obtained by investigating all details, trifling though they may appear at first, which may be capable of affording hints as to the best course to be pursued by such men who have the misfortune to be underground when an explosion occurs, and at the same time may happen to escape its direct violence. It must not be forgotten that the number of lives lost by the poisonous effects of the after-damp is, as a rule, considerably greater than that due to either the high temperature or the dynamic violence generated by the explosion itself, and that snything that can be done to lessen the mortality from the first-named cause would go far towards reducing the formidable death-roll of colliery explosions; moreover, if this could be done the number of the victims of the explosions would be more likely to be confined to those who, by their own neglect or carelessness, orignated the disaster, or, at any rate, who were in the immediate neighbourhood, and might be supposed to be able to see what is going on. For it may almost be taken as an axiom that nearly all colliery explosions are preventible, provided only that due care be exercised, and no mistakes made underground.

At present it is impossible to form any clear idea of the cause or even of the exact nature of the disaster. As far as is known, the colliery was kept in good order in many essential details. The system of ventilation seems to have been a good one, and the fan, by which the air current was drawn up the up-cast, seems to have been of ample power to deal with any ordinary amount of gas, although the airways must have been very long ones. The shaft which suffored most severely was naturally the up-cast, which is one of the three Ferndale pits at Taylorstown. This seems to have been seriously damaged, the fan engine being injured, so that ventilawas checked for a time on this account, as well as by the ordinary results of an explosion, such as doors and stoppings blown down, crossings destroyed, and heavy falls from the roof blocking the airways. Prompt measures were taken to restore the circulation of air, and the winding shaft does not, fortunately, seem to have sustained much damage. The immediate cause of the explosion is not known, and, perhaps, never will be, although we may look for more information when the Inspector of Mines makes hi report. It would seem that the pit had been examined as usual by the firemen just before the accident took place, and nothing unusual was noticed, or has at any rate been reported. It is, of course, possible that a sudden outburst of gas took place, or else it may have been that a shot ignited a small quantity of gas, and that the explosive wave was propogated by further explosions of coal dust, of which there seems to have been an undue amount in the pits. These are said to have been much drier and more dusty than they should have been, but it will no doubt be proved by the investigation what methods, if any, were used to sprinkle or moisten the dust. The importance of this precaution has been so thoroughly made clear and insisted on within the last year or two, that we presume it was fully attended to by the managemennt of the Ferndale pits. It is now thoroughly well known that coal dust alone suspended in air, even when no gas is present, forms an explosive mixture, whilst a small amount of gas, which, by itself, would do no harm, may start a terrible explosion in a dusty mine. The conditions under which coal dust alone is capable of originating an explosion are beginning to be better understood; it differs in so far from a mixture of gas and air, in that it can only be fired with the utmost difficulty, if at all, by an ordinary light; it may company, which employs altogether some 5000 men underground, in this respect be compared to dynamite or to that numerous whilst the workings stretch continuously away to other pits class of "safety explosives" that burn quietly when lit, but explode violently, when detonated by means of an explosive cap. A small amount of gas or a blown-out shot may be the detonator that fires a huge coal dust explosion. The tendency of modern researches and experiments is to attribute the cause of explosions rather to blown-out or to overcharged shots than to any other origin, and there is very much to be said in support of this view. At any rate, recent experiments seem to have made it quite certain that there is not a single explosive in use at the present day that will not ignite either gas or dust i carelessly or improperly used, whilst, on the other hand, pretty well any explosive may be used with impunity if all necessary precautions are duly and strictly observed. Obviously those men who have the misfortune to bring about an explosion have been brought to bank alive, although some were a good are the very first, as a rule, to fall victims to its violence, and all direct evidence as to its origin is thereby destroyed, whilst, A curious incident; and one to which attention should be owing to this same violence and its destructive effects, even

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circumstantial evidence is, in most cases, wanting entirely, or, at least, is very indefinite.

We have called attention in another part of this issue to the recently-published statistics of fatal accidents in mines during the past year. It is a most deplorable fact that the number of deaths from this one explosion should just exceed the total welcome notoriety in the matter of fatal accidents. Although it is certainly one of the most active of our coal-producing districts, one of the foremost both in the magnitude of its coal production and in the number of men which it employs underround, yet the proportion of lives lost is, nevertheless, great in proportion either to the tonnage or the number of men em-ployed. Roughly speaking, the South Wales district raises about one-eighth of the coal of the United Kingdom, and employs nearly one-seventh of the coal miners, its production per head being a trifle below the general average. The number of deaths in this district last year was 187 out of a total of 1033, or (say) some 40 or 50 more lives lost than there should have been taking the average of the whole United Kingdom as a standard. Last year, too, this disproportion was not due to explosions, but very largely to falls. It is hard to say why this should be, or where the proper remedy for this excessive death-roll should be sought-We can only hope that the official investigation of this last deplorable accident will be most searching, and that it may be possible to draw from it lessons that will teach us how best to avoid similar casualties in the future, or at any rate, how to proceed so as to diminish the number of their victims.

HANNAN'S PROPRIETARY.

THE meeting of Hannan's Proprietary was of the extremest importance from a general, as well as from a particular point of view. The company owns a property in what is regarded as one of the richest and most promising districts in Western Australia, and, therefore, upon its development and production a very great deal depends. "Hunnan's" has long been a name to conjure with, and the mere mention of it is sufficient to bring up before one's mental vision dreams of fabulous wealth. The praises of this district have been sounded so loudly and so persistently, that all are looking forward to an exceptional performance, and should the latter fail to come up to anticipations, then the whole of the colony will suffer with it. We are whole of the on the eve, so indications demonstrably evidence, of a West Australian boom, and it would be truly lamentable were the well-based hopes of the public to be rudely crushed by a serious failure just when everything was looking so bright and promising. And yet during the week we seemed on the very eve of such a disaster. There were startling rumours abroad that a dyke had cut off the reef in the Great Boulder Mine, and naturally such grave news gave rise to general discouragement, which affected the whole of the Westralian section of the market. Happily, no confirmation was forthcoming, and confidence and hopefulness quickly revived, thanks to the support given to this feeling in some measure by the encou. raging statements made at the meeting of Hannan's Proprietary. The meeting happened to be held at a most opportune moment, for not only was it able to revive confidence in the Great Boulder, but it was able to re-assure the public on certain matters which vitally affect the future welfare of the colony. Mr. George Gray, the company's manager in Australia, was able to be present and to deliver a statement which should do the greatest good, not only for the district in which this particular mine is situate, but for the whole of Western Australia generally. We heartily recommend our readers to thoroughly read and digest his speech, and to calmly criticise it, for we think it is one of the most important delivered of recent times. Mr. GRAY showed pretty conclusively that, apart from the water question, the colony is not so badly off in other respects as it is generally imagined to be. There is the one great fact in its favour that energetic steps are being taken to minimise and remove the obstacles which do exist-and no one denies that they are formidableand that ultimately complete success will crown these efforts. Not so long ago it was the fashion to abuse the Government for displaying such a lack of interest in the industry, and such astounding lethargy in promoting its well-being. Such abuse was fully deserved. Evidently, like many others, the Government was sceptical of the colony's richness. Now, however, it is convinced that not only is it a great gold field, but that it bids fair in the future to take its stand in the very front rank, and as evidence of its belief, it has energetically and patriotically provided ways and means of minimising and, if possible, of removing the troubles likely to retard the progress of the industry. Already the Government has done much, but it is intent upon doing more. The two greatest drawbacks are the difficulties of transport and the lack of water. The former can easily be remedied, and energetic steps have been taken to this desirable end. Railways are now being built, with special reference to Article 148, Law No. 19, 1895, uninterrupted progression towards success. Mr. Gray's observations on the water question are as interesting as they are re-assuring. He does not minimise the seriousness of it, but over the colony. The inference to be drawn from his remarks is that we are not very far from a removal of the trouble, and that, in consequence, there is every encouragement to look to of this Republic in terms of Law No. 23, 1895, and by such other highly assuring. The company has obtained from the Govern- "Every person residing within the boundaries of a proclaimed has not the least doubt that the supply of water will resistance against the Government or lawful authority in the keep pase with the demand. But even a water supply is of fields shall, over and above the punishment laid dewn by law of causing their property to be forfeited for the offences against

whole of the colony shows no indications of permanence, but is only temporarily patchy and pockety. Mr. Gray addressed himself at considerable length to this pertinent question, and there is not the slightest doubt that his observations will remove many fears, and convert a large number of people to his number of deaths from the same cause during the whole of own way of thinking. But for all that, it would be highly im1895. South Wales is, unfortunately, earning for itself an unquestion has been settled once for all; and that it need never be raised in the future. There is certainly much plausi-bility in his testimony, and it deserves most weighty consideration. But that is all. We have yet to receive proof-and, what is more, we shall have to wait a considerable time for it—that Western Australia is as rich in depth as it is at the surface. But, as regards the Hannan's Proprietary in particular, the case is different. Mr. GRAY is the manager of the property, and is responsible for its success and prosperity. Directors and shareholders alike must be guided by him. Their opinion of the property must be based upon his. What he had to say, therefore, was highly encouraging, from every point of view, and in respect to the most important question of richness in depth, his statement that "in fact, at no point of attack that I have seen do any of these lode formations show the slightest evidence of weakness in depth," must remove much doubt, and prevail upon those directly interested to await the future with little apprehension. We have already spoken of the Great Boulder, and we again urge our readers to peruse the statements delivered respecting this property. We have no space to refer to them at greater length. We are pleased that such re-assurance could be given, and we sincerely hope that henceforth rumours of a serious nature regarding any property will find the public more calm and less nervous than they showed themselves to be during the past week.

THE SITUATION IN THE TRANSVAAL

THE situation in the Transvaul is still acute, and calculated to engender the gravest anxiety. Rumours of a conflicting nature are continually reaching us, and it is extremely difficu t to gather from them what is really taking place. The proclamation by President KRUGER, however, throws some light upon the situation, but, unhappily, it revea's a state of things far removed from cheerful. We can gather from it that the agitation is but little calmed; that the Uitlander community is still in a state of feverish unrest; and that desperation may yet be provoked to grave and serious action. Though the rumours have been denied in official quarters that some of the mines have been shut down, there is abundant justification for regarding these denials as false. At any rate, if no action of such a grave character has been taken, there is little doubt that it is in contemplation. Apart from the effects of the late crisis and the imprisonment of most of the men connected with the industry, there is the scarcity of labour and the drought to take into consideration, both of which are powerful enough in themselves to enforce the closing of some of the mines. But even these are not the only reasons, for, reading between the lines of President KRUGER's proclamation, it may be part of the scheme, or, rather the plot, of leading capitalists to lower the values of South African securities. Men determined to play such a desperate game, as they have recently attempted, are not likely to be thwarted by an early failure, and so long as they have a card of some kind in their hands, they may be trusted not to throw it away until they are assured that their chances are absolutely lost. But, as we have said, it is extremely difficult and delicate to decide. The proclamation may lend support to many renderings, one of which is the one we have imputed. On the other hand, it may be another smart move of President Knuger. There is absolutely no telling. By displaying such concern for the welfare of the mining industry he is likely to enlist considerable sympathy on this side of the water. But let us look upon his proclamation calmly and without prejudice, and let us try to gather some reliable data from it. They will be few, but they will shed a little light, however feeble, on the darkness in which we are groping. We will quote the proclamation entire: "Whereas the reasons given for such steps are said to consist in the present dearth of labour, and whereas there are good grounds to suspect from other information received that such intended closing of mines has its origin in a continuation of the disturbing and unlawful commotions which took place recently, and not in the causes put forward or alleged as the pretext, and whereas in the interest of the public and the present general state of affairs it is highly necessary that the development of the mining industry on the gold fields be carried on, and advance peacefully and uninterruptedly, and the arbitrary closing of the mines in consequence of the above unlawful reasons cannot be otherwise than most damaging and financially detrimental to the shareholders in the various gold companies, against which the shareholders ought to be warned in their own interests: Therefore I, the State President, with the consent and advice of the Executive Council and dams are being constructed, so that these vital necessities re digging and trading in precious metals and precious this country to think more favourably of him than the issue of for economical working will, in all likelihood, be early obviated, and the industry be allowed to move forward in a gradual and Government will vigorously continue as in the past to guarantee adequate protection for the peaceful likely to happen in the gold fields in the Transvaul State where so development of the mining industry, and that each and much English money has been invested. The proplamation every one who attempts to disturb or disturbs this psacehe showed pretty conclusively, not only the steps already taken ful development shall be subjected to the severest penalty of haste. Use has again been made of Article 148 of the Gold to get a supply of water, but the operations still in progress all the law. And I further proclaim that the Government is prepared to extend every help and assistance in its power to facilitate and promote the supply of native labour on the diggings ful resistance to the lawful authority on the fields, to forfeiture the future of the industry with considerable hopefulness. As for the Hannan's Proprietary property itself, his statement was mentioned development." Article 148 above referred to reads:— directed were more sensitive in their pockets than anymentioned development." Article 148 above referred to reads :ment a water-right with a tenure of 21 years. Mr. Gray Geld who shall be guilty of rising in rebellion or of any unlawful companies holding property in the Transvaal to know that there

little use if, as a very great section of the public suppose, the for such offence, forfeit to the State all his rights in and goods on the said fields." Law No. 23 refers to the native pass laws, which were promulgated during the last ordinary Session of the Volksraad and came into force on the 1st January last.

From the above we may gather pretty conclusively that there is considerable agitation still existent, that the trouble is very far from an end, and that the mining industry, owing to obvious causes, is likely to suffer for some time to come. But there is much ground for hope. The proclamation should have a happy effect. It should go a long way to reassure the world that the Transvaal Government are willing to foster the welfare of the mining industry; at any rate, that it is far from their wish to see it ruined. Even if we may be sure that this desire is not created by purely unselfish motives, we may yet take heart and be encouraged. It also shows that President KEUGER, though he desires to punish the ringleaders, is fully aware of the sufferings the dislocation of the mining industry would bring upon thousands of innocent shareholders. Being fully conscious of this, we can at least credit him with humane feelings. He may be shrewd and exceedingly wise, but he is known to be kind-hearted. Upon his humanity, therefore, let us base hope and confidence.

THE ROYAL SCHOOL OF MINES.

N no point will the recent dinner of Old Students of the Royal School of Mines and Science suffer by comparison with the 22 occasions which preceded it. The fulness of the attendance, the freshness and spontaneity characterising the speeches, and the general enthusiasm which marked the proceedings, from the Royal toast down to the measured tones in which Mr. Graves gave the roll-call of regretful absentees, combined to show that the banquet, as an annual event, has steadily gained favour among the representative individuals of the industry in its several branches. While in name the dinner is limited by its association with the School, its scope is in reality co-extensive with the whole mining profession. No narrow spirit of exclusiveness bars from entry iuto the charmed circle the company organiser and the City financier, whose careers would certainly be something differen if there were no mineral wealth to form the basis of Limited Liability enterprise. The scientist, on the other hand, whose life-work has been given to building upon the solid foundations of systematised knowledge, and whose theory, whatever wrong-headed people may say, allies itself so usefully with practice, does not distain to exchange for a time the quiet but fuma-laden atmosphere of his laboratory for the clatter of plates and the soothing influences of after-dinner tobacco-smoke. Thus, upon a common ground meet a companionable medley of physicists, chemists, company directors, geologists, and mining engineers, and, in so far as a spirit of union and a desire to promote the best interests of the profession as a whole is diffused broadcast among the guests, the results likely to accrue from this pleasing interchange of good fellowship are wholly good. The wonder, expressed by one speaker, that no official festivities were held before the year 1873 is not without its force, though it would be unwise to give way too completely to astonishment when it is remembered how the simplest ideas are the production of time and genius. Something may lie in the ingenious explanation that the round of official and individual festivities was too absorbing to leave the door open for a collective enjoyment of table-pleasures. But the fusion, so to speak, of any number of minor and irresponsible festivities into the annual official dinner will be conceded by every one to be a distinct advance, notwithstanding any ideas one may hold about the relative advantages of collectivism and individualism. An institution that can boast so distinguished a roll of professors and associates, whose history has been so largely the biography of England's greatest scientists, and which exerts so enormous an influence upon industrial development in both hemispheres, certainly owes it no less to the nation than to its amour-propre that the close of each year in its career, and the termination of each 12 months of earnest, though unpretending, work, should be marked out for some special celebra. tion. There can, moreover, be little doubt that a yearly function of this sort is valuable as affording opportunities for comparing progress, and for a sort of scientific and industrial stock-taking. Upon grounds allsufficient such as these, the annual dinner of old students at the Royal School of Mines and Science may be expected to grow steadily in favour, so that in time the occasion, by constant repetition, may have attained such a hoary-headed antiquity as to exclude all wonder at the date of its origin.

NOTES AND COMMENTS.

PRESIDENT KRUGER appears desirous of drawing attention to the fact that his Republic possesses the elements of selfgovernment of a beneficial character. Perhaps at the present moment he could not have done anything which would incline the the proclamation against closing the mines. It is calcuthe lated to put a stop to the rumours of uncertainty as to what was bears every trace in its wording of having been is med with Law of 1895, which subjects persons residing within the boundaries of a proclaimed gold field, who are guilty of unlawof their rights and goods on the field. It may be where else. However this may be, it is well for shareholders in is no foundation for the suggestion that the State has any idea

order of individuals over whom, for the moment, the company s no control. The arbitrary closing of mines in the Rand would spell ruin to thousands of English shareholders, and it is well that they should know that the Transvaal Government is prepared, as stated in the proclamation, to extend every help and assistance in its power to facilitate and promote the supply of native labour on the diggings of the Republic. The Gold Law of 1895 in Article 145 subjects any person guilty of damaging a mine, claim, machinery, or other mine property, or on, or even guilty of attempting to commit either of those crimes, to a fine of from £100 to £1000, or to imprison. ment with hard labour for a period up to 10 years. Of this the President says nothing; still it would seem that he has something up his sleeve, of which the State will be able to avail itself if there be any ground for the suggestion that any person is thinking of closing a mine for his own advantage.

Ir is well, too, when this matter is under consideration, for the public to know that there is evidence in the Gold Law of 1895 that purity of administration of the gold fields is the aspiration of the Boer Government. By Article 24 of that law they set an example which might well be copied by this and other countries. "It is not permitted for the Minister of Mines, the officials of this department, as well as special Landdrosts, a wistant Landdrosts, judicial commissioners, and the officials of their departments, to hold claims, directly or indirectly, on any prospecting or proclaimed field, or to do any kind of trade or agency of whatever nature, or to have shares in any company or syndicate or partnership of a mining matter. It is also forbidden for Landdrosts, head officials, and their subordinates to act as directors, advisers, controllers, or officials of any mining company. Should it be found that the above-mentioned have made themselves guilty of the contravention of this Article, they may be suspended or discharged."

EVEN if critically-minded, shareholders in the Gold Fields of Mysore will find it difficult to remain dissatisfied with the condition of affairs described to them at Tuesday's meeting of the company. One fact alone was sufficient to justify a comfortable attitude of mind in regard to the whole future of the company. Mr. John Taylor, in his elaborate and complete exposition of the present posture of affairs at the mine, was able to show that the lodes were richest in the deepest workings-a fact, the supreme importance of which upon the company's ultimate prosperity cannot be over-rated. A greater encouragement to prosecute the mine's working with that vigour which generally characterises mining operations conducted in Indian mines could hardly be forthcoming, and the choice made by the directors of the property to retain, when they were disposing of several blocks to other companies, is abundantly vindicated by the manner in which it is proving to be gold-bearing. Writing in the full light of the superintendent's and managers' reports, it is difficult to say anything fresh, or even to particularise at all, concerning the workings in the Mysore Gold Fields Company's mine. Shareholders may be safely left to draw their own general conclusions for the sufficiency of matter placed in their hands : for, whatever may be the case elsewhere, shareholders in Indian mines have at least the fullest possible statement given them as to the progress of their affairs underground. Besides their actual mining operations, there is another side to the company's affairs, which Lord Ribblesdale dealt with at length—the interest, that is to say, amounting in some cases to a very substantial proportion of the whole capital, which the company holds in several other Indian undertakings. From these sources there is every reason to expect in the future a considerable accession to the company's revenues.

NATURALLY the Chairman of the World's Treasure (Limited), a West Australian company, had very little to say at the statutory meeting held last Monday, but what he did say was most encouraging, and likely to lead the shareholders to look forward to the future with considerable heps. He was able to announce the satisfactory intelligence that the transfer of the property had been completed, and that everything was now in order for the immediate and active development of the mine. It will be remembered that when the prospectus was issued the amount of capital called for was £70,000, of which £30,000 was to go to the vendors, and the remaining £40,000 to be retained as working capital. The Chairman informed the meeting that this latter sum is still intact. The shareholders will, undoubtedly, regard it as an arrangement greatly favourable to the company, which the directors have made with the well-known firm of Messrs. Bewick, Moreing, and Co., to act as the company's consulting engineers. As for the property itself, one of the great things in its favour is the assertion by experts that it is indisputable that the Wealth of Nations reef runs through its whole length, and that where the reef has been opened on, gold is largely shown. Should, of course, this prove correct there is every probability of the mine turning out of great value, and shareholders will look forward to the reception of confirmatory

an advance proof of such of the tables of mineral statistics for 1895 as relate to fatal accidents in coal mines, metal mines, and quarries, the latter being issued this year for the first time. We are delighted at seeing the promptitude with which this paper has been published, and its value, thus issued at so early a date and as a separate publication, can scarcely be over-estimated. In the soal mining sections we note that whilst the number of separate fatal accidents has slightly increased-namely, from 813 in 1894 to 859 in 1895, the number

94 deaths recorded as due to irruption of water as against none at all in 1894; of these no less than 77 deaths were due to the terrible accident in the Diglake Colliery in the North Staffordshire district, which occurred about January of last year. It is worth noting that as far as statistics are available, the actual mortality last year is just a trifle below the average for the last 40 years, although it is only within the last six years that casualties of branch railways have been included. The greatest number of deaths are, as usual, caused by falls of rock underground, the number of lives lost by this cause being 418, as against 444 in the previous year, and an annual average of about 430 for the last 40 years. It is a most significant fact that that particular cause, which is more under the miners' own control than any other, should be the one which causes the greatest number of casualties, and one that may even throw doubt upon the real value of protective legisla lation until such time as we can make miners careful by Act of Parliament. In metalliferous mines the total number of deaths is returned at 53, an increase of seven on the year previous, and the number in quarries is given at 96. Until we have statistics of the number of men engaged it is hard to form any opinion as to the value of these figures. They may prove the high state of perfection to which our metal mining has attained, or they may give evidence of its decadence. We cannot tell which is the correct explanation until we have more data before us, and we hope that this will be the case very shortly, as the summaries of mineral statistics ought to be out before long.

Mone than once we have expressed a strong hope that the time would not be far distant when the water difficulty, which undoubtedly at the present exists in West Australia, would be solved. The statement so often made at meetings of mining companies-that in the neighbourhood of their particular properties water had actually been struck at a greater or less depth attested, to our thinking, the possibility and even, perhaps, the probability, that systematic and vigorous boring operations would eventually remove, or, at least, greatly mitigate, the evils of a water famine. The same view has recommended itself in other quarters, where matters are not generally seen through a reseate mist of sentiment, and when to the possibilities of striking water by boring are added proposa's for conserving the rainfalls that occasionally burst in profusion over the country, the expectation of an adequate supply in the not too distant future, receives considerable ground in justification. Of course, if West Australia realised the forecasts of those connected with its mining industry, and took rank with the Rand and California in the old days, it is, in the light of past engineering achievement, inconceivable that a rich and valuable industry would be allowed to perish for want of water. Even if the famine could only be removed by the conveyance of water from the sea, and by condensation, the output of the colony might ultimately justify such a scheme being put into effect, expensive though it certainly would be. In this matter of water for West Australia, the doctrine of truth lying in the means, seem to us to be beyond all question. Among people who are interested in booming the West Australian industry, there is undoubtedly a disposition to disallow a true value to the problem now engaging the attention of the Perth engineers; but even this tendency is open to less grave objection than the vocation of the professional pessimist, who divides his time into equal portions of crying in the wilderness and running amok.

BEITISH GUIANA, as a gold-producing country, is evidently being opened up with greater rapidity than at any earlier period in its industrial career. The stories of great wealth in the interior, some of them attested by pronouncements from the most responsible quarters, are producing their inevitable result both in the locality itself and in London. Added to the zeal normally characterising the average financier and industrialist on the look out for new and profitable spheres for his activity, the mining revival has behind it all the impetus occasioned by the widespread movement to substitute gold for sugar as a staple product. There is no need to go all the way with those enthusiasts who claim for Guiana precedence over all the world's gold fields; but even a cold and critical perusal of the available statements from experienced quarters leads to a well-defined conviction that gold prospects in the colonial river valleys exceed those upon which many a thriving industry has been built up in the past. The latest move in connection with the colony's development has been the formation at Georgetown of "a company to be called the British Guiana Chartered Company," whose purpose is expansively defined as being "to open up and develop the interior of British Guiana." Notwithstanding that the company's operations are to be confined to territories south of the famous Schomburgk line, it would seem, provided the reports of British Guiana's internal resources rest upon a substantial foundation, that they will have their hands full.

The San Francisco News Letter, in the recent number to hand by mail, speaks very eloquently on behalf of Major Frank McLaughlin, of the good work he has done in the management of mines on the Feather River, and very powerfully defends him from the uncalled for and most abusive attacks made upon him by a portion of the San Francisco Press. With the whole of this eloquent defence we entirely agree, for his critics have quite overlooked the great and good work he has done on behalf of the mining industry of the State. As the Letter remarks: "The English investors in the Feather River mines have nothing but the kindliest feelings toward the man, who, ever watchful of their interests, has devoted years of his life to the work on their property. During the entire seven years which Major McLaughlin has devoted to the management of of deaths for the same periods has diminished from 1127 to 1033. This fortunate result is very largely due to the comparative immunity from explosives which has happily characterised the past year, there being only 55 deaths recorded as due to this cause, as against 317 in the year previous. The increase in 1895 was almost entirely in the miscellaneous undergound section, there being deaths recorded as due to this cause, as against as work of such magnitude and character. Without McLaughlin, the snow-fed torrents of the turbulent Feather would still be dashing with heavy volume over the massive boulders which

mark its course through mountain gorges, instead of flowing eacefully under control as it does now, elevated many feet above its ancient bed, and without a McLaughlin the object of this Herculean task will never be attained."

Now that Madagascar has relapsed into a state of orderliness and peace under the administration of our amiable neighbours whose conduct after the capture of the euphoniously-named capital appears to have been altogether sans reproche—it may not be altogether out of place to enquire, in a spirit of courteous interest, what the French are going to do with the island thus happily and easily acquired. Though the statement, made on English responsibility, will certainly be called in question on the score of national prejudice, it is difficult to avoid the reflection that French colonisation, from the commercial point of view, has been largely a failure. Those in need of a test case to illustrate this view may watch the future development of the island peopled by the philologically-minded Hova. Madagascar is said to contain stores of gold, and if such should turn out to be the case, the French will have a fine opportunity of showing us how a gold mining country ought to be opened up, as also of demonstrating the superiority of the average Madagascar gold mine over the crowd of Transvaal enterprises which were so persistently "talked down" by the French officials at a time when it was feared that Paris gold was setting rather more torrentially in the direction of the Rand than of St. Petersburg. We can afford to be magnanimous in this matter, and nothing would please us better than to see the predictions of our French neighbours more than abundantly realised under the propitious supervision of their Colonial office. If there is anything which could reconcile the Gaul to temporary banishment from the boulevards it would be the prospect of turning to his own account the gold discovered in a bona fide French colony, so that, should the rumours of gold deposits in the Hova Queen's dominions prove to have some stable foundation, this last colonial enterprise of the French will start under the most favourable conditions.

A PROTEST against too close a governmental supervision of mining has recently been made by an association representing the combined interests of the mining industry throughout Austria. A measure has passed the Lower House providing for the appointment of Government mining inspectors, notwithstanding that the duties proposed to be given to the new officers are already satisfactorily performed by a staff now in existence. By the new Act it is proposed to endow the inspectors with powers which would assuredly lead to misunderstanding and accertain amount, at least, of antagonism between the two staffs of inspectors, such as would certainly embarrass the permanent officials, and might seriously retard the proper development of the country's industrial growth. To the English mind the powers vested in the inspectors already appointed are sufficiently wide. They are specially able to exercise a controlling influence upon the direction given to mining operations, and in case of labour disputes they are to undertake the difficult and responsible task of mediation between masters and men. What would be the resultant advantages of appointing a crowd of additional inspectors is not easily apparent, but the drawbacks from such a system of overlapping control are plain enough. Foreseeing them, the mining association we have referred to have memorialised the Upper House against the confirmation of the law, and, so far as we are able to judge from the point of view of a different nationality, it would appear a good thing if the petitioners succeeded in effecting their object.

THE MINING MARKET.

FRIDAY EVENING.

a to b a m H h to k h G

A week of stagnation, relieved only by a rise in copper shares,

The week now approaching conclusion has been quite the dullest in the Mining Market since the Kaffir boom set in 18 months ago. Just as there has been no buying, there has been no attempt to sell. The public have remained entirely out of the market and the professionals have evenced no inclination to attempt to make professionals have evened no inclination to attempt to make money out of one another. There is no little reason in this attitude of inactivity. Several points have yet to be cleared, which are equally uncertain from the aspect of the bull and the bear. Existing commitments for the rise are not sufficiently onerous to inspire uneasiness, and the bears are content to lie low in the hope that the chapter of accidents will do them another good turn. In view of this stagnation it is evident that our remarks this week must be brief and perhaps common, place. Saturday witnessed the smallest another good turn. In view of this stagnation is is evident that our remarks this week must be brief and perhaps common-place. Saturday witnessed the smallest possible amount of business, with a scanty attendance in the Stock Exchange. On Monday the carry-over in mines took place. It occupied but an hour or two, and set people wondering whether the extra day was still wanted for the Settlement. Rates were very light. East Rand were carried over even, Chartered carried a contange of threepener, and on the Gold shares the charges ranged round 5 per cent. There was hardly any change worth speaking about in the Making-up list, and the differences to be paid and received were accordingly insignificant. Westralians were carried over at rates averaging \$\frac{1}{2}\$d. to 1d. in the \$\mathcal{L}\$, and in Miscellaneous many shares were borrowed even. The Settlement disclosed without doubt that the open account was small and fairly strong. Goldfields Deferred were flat in the afternoon, and there was some disposition to depreciate Deep Level shares. West Australians gave way in sympathy with a sudden flop in Grest Boulders, but Miscellaneous were firm, Broken Hills and New Zesland shares improving to a moderate extent, whilst Indians were land shares improving to a moderate extent, whilst Indians were irregular. On Tuesday, which was making-up day in other departments of the Stock Exchange, the tone was decidedly more cheefful

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was not important. Renewed attention was directed to Gold Fields Deferred, which gave way to some further extent. West Australians were firm, with a small business doing, in which buyers and sellers were evenly balanced. Indians and Copper shares were better. Thursday was Pay day, and when the routine work was done with there was no attempt to initiate fresh business. The same remarklapplies to to-day. There has been absolutely nothing doing, except in copper shares and one or two specialities commanding the attention of a small clique.

South Africans.

with thore was no attempt to initiate fresh business. The same remarkjapplies to to-day. There has been absolutely nothing doing, except in copper shares and one or two specialities commanding the attention of a small clique.

South Africans.

The only movement of any practical importance in the Kafff Girous has been in Consolidated Gold Fields Deferred, which have been made the medium of sales, speculative or otherwise, on the assumption that the part taken by sundry officials of the company in the Johannesburg insurrection may have the effect of shunting some of the responsibility for what has happened from the Chartered Company on to the Gold Fields. The extreme fluctuations in these shares have been between 10\fo n Saturday, and 2\fo n Wednesday. Finally the price shows a reduction of \(\frac{1}{12} \text{ at } \) \(\frac{1}{12} \text{ the Price red are 6d. higher at 23s., and the Debentures 2 points up at 107\fo 12 \text{ Gold Fields Deep are unchanged at 7\fo 12, and Gold Trusts \(\frac{1}{2} \text{ higher at 7\fo 1} \). The selling of Gold Fields has not been accompanied by any open buying of Chartered, although a "tin" is prevalent that these shares are likely to improve upon Mr. Rhodes's arrival in this country. One hears of the giving of option money for the call for the end of February, but there is no getting over the fact that Chartered made up at the same price on Monday as at the previous Settlement, whilst the price to-night is 3\fo 12, sat as it was a week ago. A slight increase in the floating supply of shares was shown by the small contango already mentioned. The suggestion that the trial of Dr. Jameson and his fellow prisoners may not take place for another six months, has naturally tended to discourage speculative buying on the part of the public. At three colock to-day one of the largest doalers in Chartered stated that he had dealt in 40 shares during the morning, and up to that time had been unable to undo his bargain. This will demonstr at what we mean in speaking of the inactivity o

St. Augustines which closed last week at 8s. 3d. have been persistently bought, and close to-night as good at 13s., Jagers are unchanged at 8\frac{1}{2}.

West Australians.

A very decided falling off in the volume of business has been mulifest in this department, but prices have been fairly well maintained, and very little stock has come out. A determined attack was made upon Great Boulders on Monday, the shares being sold down to 5\frac{1}{2}, on various rumours, the most persistent of which was that the reef was cut off by a dyke. On Tuesday there was a recovery to 5\frac{1}{2} on a contradiction of the rumour, but the attack was renewed on Thursday, and the shares are finally half a point down at 5\frac{1}{2}. The very encouraging statement delivered by Mr. Gray, the resident engineer, to the share-holders of Hannan's Proprietary on Monday, and to those of the Associated Mines on Wednesday, had a more directly favourable effect in the case of the latter than of the former. Associated are \frac{1}{1}\text{ higher at 1\frac{3}{2}\text{, whilst Proprietary are \frac{1}{2}\text{ down at 1. At the very time when Mr. Gray was reporting a large increase in the water supply, a cablegram received by the Westralia Cable Agency gave information that a flow of 170,000 gallons of salt water per 24 hours had been struck. This must benefit not merely the Proprietary Company, but the whole of the Hannan's district. Brownhills have given way to the extent of \frac{1}{1}\text{, and close no better than 6\frac{1}{2}\text{. Hannan's Reward are unchanged at 3\frac{2}{3}\text{, after dipping to 3\frac{2}{3}\text{ on Monday, and almost touching 4 on Wednesday. True Blues are the turn easier at 1\frac{1}{3}\text{, but marked firmness has been shown in Hannan's North, which closed at 1\frac{1}{3}\text{. Hit or Miss are rather harder at 1\frac{1}{3}\text{. Gains of 6d. are shown in West Australian Mining at 9\frac{2}{3}\text{, whilst Mainland Consols at 3\text{, White Feather at 2\frac{1}{3}\text{. Hampton Plains at 4\frac{1}{3}\tex

Miscellaneous.

The most notable move in this market has been in Rio Tinto, which close no less than 1½ higher at 17½, chiefly on French buying, and in sympathy with the higher price of copper. Mason and Barry have risen ½ to 2½, Tharsis ½ to 4½, Capes ½ to 2½, Copia no ½ to 2½, Libiola ½ to 2½, and Anaconda ½ to 6½. Broken Hills have been steadily supported, and close ½ better at 3. Golden Feathers have improved to 9s. 6d. Wentworths are rather easier at 1, and Aladdins ½ better at 1½. Some irregularity is shown in Indians, for whilst Mysores have advanced ½ to 3½, Ooregums have shed the same fraction at 2½. Nundydroog at 2½ and Champion Reefs at 5½ are without literation. The New Zealand group has developed a special strength under the lead of Waihi Silverton, which closes ½ up at 3¾, Waihi has gained ¼ at 6, Waite-kauri ¼ at 3¼, and Kapanga 2s. at 9s. 3d. A better tone has been evident in Charters Towers shares. Brilliant and St. George have advanced to 2, and Day Dawn Block to 10s. The most notable move in this market has been in Rio Tinto,

STOCK EXCHANGE SETTLING DAYS.
Settling Days on the Stock Exchange are as follows:—

CONSOLS.

Monday, February 3. | Monday, March 2.

STOCKS AND SHARES.

FEBRUARY.

Wednesday, February 12 | Thursday, February 13

Wednosday, February 26 | Thursday, February 27

Contango Days for Mining Market:—

Monday, February 10 | Monday, February 24

SOUTH AUSTRALIAN LETTER.

(FROM OUR OWN CORRESPONDENT.)

ADELAIDE, CHRISTMAS, 1895.

ADELAIDE, CHRISTMAS, 1895.

THE compliments of the season to you and all your readers, and may the coming year see mining in Australia more prosperous than ever.

I have delayed writing during the past month, because of an unpleasant rumour with reference to the Angipena Treasure Gold Mine, which property has been alluded to in former letters. It may be remembere I that assays of the lode yielded rich results. Mr. J. V. Parkes, F.G.S., our late Inspector of Mines, had reported on the reef, and broke out himself a number of samples, which, on being assayed by the Government Assayer, Mr. G. A. Goyder, returned an average of over 9 ounces of gold por ton. A parcel of 4 tons 7 cwts. of stone from the lode was afterwards sent to the Government Cyanide Works, and, roughly speaking, gave nearly 2½ ounces per ton from the battery, and about 2 ounces per ton from the tailings, treated by the cyanide process. Some three months after this it was rumoured that two of the men employed on the mine had been having a drinking bout, during which one had accused the other of having engaged him to "salt" the 4½ tons of ore before it was sent to the Government works for treatment—on promise of giving him some shares in the mine, but that he had since refused to pay him for the dirty work, though, as he alleged, he had performed his part of the contract. Many persons who knew the reef refused to believe this extraordinary story, and for a few weeks no steps were taken to investigate the matter. The strange part of it was that the very man who adwho knew the reef refused to believe this extraordinary story, and for a few weeks no steps were taken to investigate the matter. The strange part of it was that the very man who admitted doing the salting stated that he got the gold for the purpose out of the same mine! The "salt" was estimated to have been applied at the rate of 2 ounces per ton, a pretty liberal allowance on a parcel of 4½ tens. Ultimately, a meeting of directors and shareholders was called, and a committee appointed to investigate the matter. They sent up an expert to examine the mine and report. This investigation led him to state that the parcel of ore had, undoubtedly, been salted. It is generally considered that if this were the case, it must have been cleverly done; also that the reef, as a whole, cannot be condemned, owing to the dishonest action of the two men, as it, undoubtedly, contains gold; and at least in some parts must be fairly rich, when at an early stage of its development a miner could pick out 8 or 10 ounces of gold for his nefarious purpose. I regret the opportunity has not been afforded me of seeing the place. Our railway authorities are very illiberal, and refuse me even the ordinary concession to Pressmen, to travel by rail at reduced rates. Considering all that I have done for the mining interest in South Australia for many years past, it would not be too much to allow me a permanent free pass on the railways of the colony—if only as representative of The Mining Journal. From all that I can learn this salting case has not affected the working of other claims on the Angipena reefs, and a number of men are still engaged steadily developing their claims with good

From all that I can learn this salting case has not affected the working of other claims on the Angipena reefs, and a number of men are still engaged steadily developing their claims with good hopes of success. I am informed that some parts of the reef have without doubt given rich stone, and the drillings generally show a good proportion of fine gold. The man accused of having done the salting is to be prosecuted criminally.

Meanwhile, our gold mines in other directions are proving that we have in South Australia deposits of the precious metal as likely to become remunerative when properly worked as most of those in West Australia. I have lately visited two gold districts where mining is actively carried on—Wadnaminga and Nackara—and in both the prospects, to say the least, are highly encouraging. In fact, I saw in situ in the lodes in both places veinstone showing gold freely to the unaided eye. The former showed the richest specimens, which were admitted by West Australian men who saw them to be equal to almost anything at Coolgardie; and at Nackara, though admitted by West Australian men who saw them to be equal to almost anything at Coolgardie; and at Nackara, though the gold was finer, and the specimens less attractive, the stone was so impregnated with it as to be very payable. This reef has been satisfactorily proved for a length of about 3000 feet. Today I was shown some of the most beautiful specimens of crystallised gold from the recent discovery at Donkey Gully, near Echunga. They are quite unique in appearance and I intend to try to secure them to send to London, when you may have the opportunity of seeing them. In other localities also payable gold is being obtained, and promising ground developed. Nothing is wanting but a moderate amount of capital to employ several hundred miners, when our colony would come to the fore as a gold-producing and exporting country. I enclose a cutting from the Pert Augusta Dispatch on the Angipena gold field.

TIN TICKETING.

VALUES OF O							MINE.			
Mines	Tons	CWI	a.	Rei	tor	d.		. "	alue	d.
Dolooath No. 1	14	0		36	10		******	511	0	(
do No. 1a	14	0		36	15	0	******	514	10	(
do No. 1b	12	0	*****	37	0	0	******	444	0	(
Wheal Grenville A	20	0	*****	37	17	6	*****	757	10	(
do B	12	0	*****	38	2	6	******	457	10	(
do No. 2	4	0	*****	18	12	6	*****	74	10	(
East Pool A	12	0	*****	29	7	6	*****	352	10	-
do B	12	0	*****	29	12	6	*****	355	10	-
do No 2	2	C		13	7	6		26	15	-
Wheal Basset No. 1	11	0		38	12	6	*****	424	17	-
do No, la	10	0	*****	38	15	0	*****	387	10	-
do No. 2	4	0	*****	27	12	6	*****	110	10	-
Carn Brea No. 1	10	0		29	0	0	*****	290	0	-
do No. la	9	0		29	5	0	*****	263	5	-
do No. 2	1	0	*****	20	5	0	*****	20	5	-
Tincroft	9	0		32	5	0	*****	290	5	1
do	9	0	*****	32	10		*****	292	10	(
Phoenix United No. 1	9	0	*****	87	2	6	*****	334	2	-
do No. 2	2	0	*****	34	2	6	*****	68	5	-
South Frances United	8	0	*****	35	7	6	*****		0	1
South Condurrow	6	0	*****	38	0	0	*****	228	0	-

THE METAL MARKETS.

LONDON METAL MARKET.

THE METAL MARKET, LONDON, JANUARY 31.

THE METAL MARKET, LONDON, JANUARY 31.

Copper.

In the speculative market this week, there have been two strong currents running in opposite directions, the one apparently just as interested in the article as the other is opposed to it. Hence there have been many and wide fluctuations, which, however, resulted for the week in a rise of about 45s. per ton. The G.M.B. market opened strong, and in upward tendency. From £42 3s. 9d. s.c., and £42 10s. three months the value rapidly rose, the two positions touching on Wednesday £43 12s. 6d. and £44 respectively. This was followed by a relapse to £43 1s. 3d. s.c., whilst three months went to £43 5s. Yesterday, however, the market recovered to the best prices named above, and to-day the upward movement has made still further progress, spot rising to £43 17s. 6d. and three months to £44 10s.—the highest prices recorded since the advance of last November. The business done has been on a large scale throughout, and on two days (Monday and Thursday) the turnover exceeded 2000 tons per day. The market closed—after business at £43 12s. 6d. to £43 16s. 3d s.c., and £44 1s. 3d. to £44 5s. s.c. three months—firm at £43 15s. to £43 17s. 6d. s.c., and £44 1s. 3d. to £44 5s. s.c. three months—firm at £43 15s. to £43 17s. 6d. s.c., and £44 1s. 3d. to £44 5s. s.c. three months—firm at £43 15s. to £43 17s. 6d. s.c., and £44 1s. 3d. to £44 2s. 6d. three months. In America, Lake has risen sharply, and the reports thence come very firm.

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Has also been a firmer market, assisted by the advance in silver and by higher prices from the Straits. The opening value was £69 s.c., £59 5s. for that position and £60 for three months, being paid the same day. On Tuesday, with small fluctuations, the market advanced to £59 12s. 6d. s.c. and £50 5s. three months; on Wednesday to £60 7s. 6d. and £61, but a reaction then took place to £59 15s, spot, and £60 10s, forward, followed in its turn, by a raily to £60 6s. 3d. s.c. on Friday morning. Later in the day business was done at £60 17s. 6d. and £60 16s. 3d. three months, and the two positions close respectively at £60 5s, and £60 12s. 6d. buyers, the tendency being steady. In the Dutch market there was at first a fall of \(\frac{1}{2} \) fl. on Billiton—viz., to 35\(\frac{2}{2} \) fl., followed by a rise to 36\(\frac{1}{2} \) fl. s.c., the closing values, Banca advancing to 36\(\frac{3}{2} \) fl.

Pig Iron

opened in Glesgow firm at 46s 4d., and has advanced, with very trifling checks to 47s. 3½d., closing firm at 47s. 3d. beyers s.c. Scotch, and £47 5s. a month. Hematite and Middlesborough have respectively risen to 48s. 7½d. and 33s. 3d. The shipments from Scotland last week are reported as 5000 tons, or about 600 tons less than during the corresponding week of 1895.

Lead.

Has improve in tone and value. The close is firm at £11 Gs. 3d. to £11 7s. 6d. soft foreign, and £11 7s. 6d. to £11 10s. English.

Spelter.
firmer at £14 10s. to £14 12s. 63. ordinaries, and £14 12s. 65. to £14 15°, specials.

Antimony

remains steady at the last price-viz., £30.

Quicksilver is quiet at £7 7s. 6d. firsts and £7 4s. to £7 4s. 6d. seconds.

The following are to-night's (January 31) prices of metale:-

Alloys. BRASS: Wire

Tubes (solid draws)

Bheeta

PHOSPHOR BRONZE: Alloys II.

VIII.

VIII.

VIII.

VIII.

DURO METAL

BULL'S METAL

BULL'S METAL Fig. 6.M.B., f.o.b., Clyde, spot ...
Bootch pig. No. 1 Gartsherrie...
Coltness ...
Clyde ...
Govan ... Iron. Bars, Welsh, f.o.b, Wales
Plates
Bars, Staffordshire, at works
Sheets
Flates
Hoops
Hoops
English spring
STEEL: English spring
English spring
English spring
English cast
English at works, according to section
Load. eets ates
cops
hip plates, Middles...
host solutions are solutions and solutions are solutions are solutions.

Bpanish er soft foreign
English pig, common

Les...

Bpanish er soft foreign

Lis...

plates and bar lead

pipe
red

to bot

Speiter. Silesian ordinary brands ...
, special brands ...
Euglish Swansea ...
Sheet Zho 14 10 0 14 12 6 14 12 6 14 15 0 15 5 6 15 5 6 18 5 0 Antimony." Antimony Quicksilver. 7 7 8 Nickel. 98-99 per cent. guarantee

WE are informed that the Union Bank of Australia (Limited), at the request of the Wallarco and Moonta Mining and Smelting Com-pany (Limited), of South Australia, are about to invite private tenders for that company's well-known brand of Wallarco company's Information can be obtained from the Bank's office, at 71, Cornbill, London, E.C.

MINING JOURNAL" LIST.

ABE EVIATIONS AND REFERENCES.—Th following are the eignifications of the abbreviations and references which occur in the Share List:—Ay. Antimony; A. Arsenic; Bl. Blende; Bx. Borax; C. Copper; D. Diamond; G. Gold; I. Iron: L. Lead; M. Mundle; N. Bitrates; P. Phosphates; Q. Quicksilver; B. Ruby; S. Silver; S-l. Silver-lead; Sul. Sulphur; T. Tha; and Z. Zinc. "in the "Amount of Share" column of British Mines signifies that the mine is conducted on "Oost Book" principles; I in the "Head Office" column of African Mines signifies that deaddress given is not that of the head office, but of a sulper to the Limited Liability Law of the South African Republic.

The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

				FRICAN				hold ourselves respon					AN MINE				
Name.	Closing Price,	Closing Price	of	When last X and	up Per	OF NO. 0	Situation	Head Office.	-	Closing	Olosing Price,	Am't	1	Called	Amount of Stoc	t Situation	
Abercorn Reef G	Jan, 1, 1896	1 -/6 1/	Share 5/	Dividend.	Share.	(ssued.	Mine.	16, Tokenhouse Yas	Name.	Jan. 31, 189	Jan. 24, 1896.	Share		Share.	Shares	Mine.	Head Office.
Abbott's Con. Reefs Aldler Consolidatd African Alluvial	13/4 11/4 13/4 13/4	13/16 15/10 1 14 13/6	1 0	-	1 0	0 250,000	De Kaap	Boad Street Avenu	e. DeepG	113/16 27/10	115/18 21/18	1 0	rts Aug 10 '95	1 0 0		Rand Heidelberg	8, Old Jewry.
Conl	136 1%	6 5/- 5/6	1 0	_	0 16	8 320,000	Mozmabq. Middlebrg	11, Poultry, 19,St. Swithin's-lan Winchester House			136 136	1 0	-	1 0 0		-	8, Princes street
Gold Con.	3/ 4/ 3/ 3/6 134 134	3/ 4/	10/	5% Mar. '9	5 0 17	200,000	Mossel By	3. Copthail-building	1 0	136 156	19/16 111/16	1 0	2/-Nov. 28 '95	1 00	375,000	Rand	1
Africana	120 13/10	11/6 11/6 11/6 11/6	1 0	rts May 24 '9	1 0	1,075,000	Transvas'.	23, College Hill, 34, Clement's lane	, Development	26 36 11/16	36 36 36 34	1 0	-7-104.20 95	1 00	50,000	Heldebrg.	13, Austin Priars,
Agnes Block G Alexandra Estate G	1 3/16 7/16	16 1/16	1 0	=	1 0 0	78,507	Rand	53, College Hill 54, Old Broad-street Warnford Court, EC	Oringer . S. E C	214 234	21/6 3 21/4 3	1 0	10% Aug., 95	1 0 0	284,000	OrangeF.S.	10, Moorgate-street
Anglo-French Exp. " Matabeleland Appantoo	134 2%	311/16 513/ 1/4 21/4	16 5 0	15% Aug 29 '9	1 0 0	39,750	S. Africa Matabid. West Cost	Winchester House.	Paarl Central G	11/18 13/16	11/16 13/16	1 0	10 % Aug. '95	1 0 0	138,750	Rand	8, Old Jewry.
West United.	136 136 136 136 1 136	1 1%	1 0	5% Mar, '93	1 0 0	65,00C 100,0 0	Rand	Dashwood House, 8, Old Jewcy.1 1, Crosby Square.	Pardy's Mozambq	194 2	194 4	10/	3/- Jy 11 '95	0 10 0	13,:00	S.E. Africa	Broad St. Avenus.
Austral African Baikis Eersteling G	6/9 7/3	3/3 3 9 6/3 6/9	10/	3/-Dec. 16's	0 10 0	520,0.0	Fransvaal.	1, Crosby Square. Token Ho., Outhil As \$5, Gracechurch-st.	Piggs Peak G	16 36	/16 /16 /18 /16	1 0	=	0 17 0	60,652	Swazielnd.	6. Queen-streat-p's.
Balmorai M. RG Bannet	7/6 8/6 236 256	2 234 7/6 8/6	1 0	- =	1 0 0	158,750 200,000	Drief'nt'in	7, Lothbury, Johannesburg,	Porges Randfontn. Potchefstroom G Princess Estate G	156 176 56 11/16 3 556	156 176 26 26 3 336	1 0	10% Jan 'c8	1 0 0	389,750	Potchefstm	19, Bury-st., E.C.
Sarnato Bank	234 236	256 254	1 0	rts Sep 24 '95	1 00		=	Warnford court!	Rand Cen ral Ore	236 236			25 p c Aug. 95	1 0 0	115,000	Rand	33, Cornhill, E.C. 8, Princes-street, E.
echuanaland Exp.	10/10 111/1	8/3 8/9 19/16 1 11/1				400,00	De Kaap Bechuana.	1, Drapers gardens. 17, Basinghall-street 19, St. Swithin's-lane	Randfontein G Band Mines G Rand-Rhodesia Ex	21/2 25/2 24 24/6 13/6 13/8	24 % 25	1 0	10 p.c. Out, '95	1 0 0	332,778	Rand	120, Bishopsgt st. W
en Frovato	16 1/	136 136x6 36 34 /6 1/	5/-	5 pc Jan 16, 96	0 5 0	_	Kaap Kivr	S. Geo. Ho., E chea;	Read's Drift D Rhodesia Ex & Dv.	2 234 5% 6%	21/6 23/4 51/6 61/6	1 0	=	1 0 0	37,000	R&Ruodesa Transvani . Mt & Mash'i	19, Finsbury circus 8, Old Jewry.
onansa	23/10 13/10 31/10 39/10	23/16 25/10	1 0	=	1 0 0	2 0,000	Rand Turffont'n	4, Bishpagte. st. Wn 8, Princes-st. E.C.: 120, Bishopagate-st.	Robinson(SA)Bank	514 614	5% 6%	1 0	=	1 0 0	7:0,0:0	Rhodesia	3, Prince's street
uffelsdoorn G	2 16 3/10	31/16 39/16 35/16 31/16 16 34 13/16 15/16	1 0	rts Jy 26 '95 16/- Nv. 28 '98	1 00		9. Africa Potchefstr	15, St. Swithin's-lane 7, Lothbury.	Diamond Gold	114 156 934 934	1 1½ 9½ 9½ 11/16 13/16	1 0	6/- Jy 26 '95	1 0 0	550,000	Kaal Valley M. Rf. and	120, Bishopsgate st. 8, Prince's street 28, Austin Friars, E.
" Consolidated uluwayo Synd	13/16 15/16 36 11/6 11/16 13/16	1 136 136	1 0	5s Nov 28 '95	1 0 0	225,000 115,550	Matabld.	Warnford Court 10, Helen's Piace.	Roodepoort Deep	211/16 213/16	2-1/16 213/16	1 0	=	1 0 0	170,000	Rand	8, Prince's-street. 8, Old Jewry, E.C.
OopperC	176 256	2 2 2 36	2 0	2/6 Dec.16, '98 2/6 Dec.16, '98	2 0 0	50,311 300,000 45,000	Orange Rv Cape Col.	19, St. Swithin's-lane 9, Queen-street-place,	Rose Deep	3% 1% 76 1	536 536 4 436 36 1	1 0	5/ Aug 14 '95	1 0 0	300,000	Rand M. Rf. rand Krukersdp	Warnford-court.] 30-31, 5, Switn's, land 4, Tokenhouse bidge
en, de Kaap	278 236 136 156 1/9 2/3 8/6 9/6	134 134 1/3 1/9 8/6 9/6	1 0	10pcJuly 11'95	0 2 6	75,000	Johanbrg. De Kaap	99, Cannon-street. Palmerston Buildgs.	Rothery Block	%ia %ia	1/10 %10	1 0	-	-	175,000	-	55, Bishopsgate st.
Boodp's Deep	2 214	136 2	1 0	4/- Jan. 31 75	1 0 0	69,000 240,000 116,016	Transvaal.	15,George st. Mn. Ho.	St. Angelo	336 356 336 336 11/3a 19/18	316 316 316 316 1160 1116	1 0	1/- Bep 28 '94	1 0 0	98,000 B	Mand Lydenburg	Winchester House, 96, Gresham Ho., B. 18, S. Helen's place,
arterland G.F	11/4 11/4	13/16 13/16 13/6 13/6 41/6 43/4 5/ 6/	1 0	=	1 00	150,000	Rand	8, Old Jewry, E.C. 2, Salter's H il Court 8, Old Jewry, E.C.	Simmer & JackG	136 736 136 736		1 0	2/ Aug 14 95	0 18 6	250,000	Soutpan'bg	85, Gracechurch 85. 8, Old Jewry.
ty and Sub.NwG etseestroomG n, Bultfentein D	5/3 5/9 30/6 31/6	5/ 6/ 30/ 31/	5/	10/- June'95 9d, Jan. 16 '56	0 6 0	340,000 140,000	Rand De Kaap	98. Gresham Ho., E.C. 105, Leadenhall-street	S.A GoldTrustNew South West Rand Spitzkop (New) G	11/16 11/18	14/ 16/	1 0	5/ Jun 12 '95	1 0 0	158,000 1	Rand Lydenburg	Winchester House, 15, Bishopsgt-st, W.
n. G. Fields S A.	936 936	9% 10	1 0	4/- Jy 11 '95 20/ Nov. 14 '95	1 00	721,500 187,250	Transcani	62, Lombard-st. 30, St. Swithin's-lane 8, Old Jewry.	Stanhope	6/ 7/	6/ 7/	1 0	2/- Oet 20 '95	1 0 0	220,000 2	land Soutpan'bg	96, Gresham Ho., E. Dashwood Ho.
5 % Pref b 5 % Deben	22/9 23/3 107% 108% 6% 6%	106 107 107 16	1 0	7 1-5d De30 95 534 Jan. 2 '96	1 0 0	1,243,939 ec0,000	10	"	Tati Concessions Thistle Reef G Trans. Coal Truss , Consolidate	17/16 19/16	15/16 15/16 18/16 113/16	5/	L- Nv 28. 95	0 5 0	392,000 547,976 H 439,965 H	darberton	Gresham House, Copthall House Broad- t, House, E (
Wn DeepG	736 836 936 936	7% 8% 9% 9% md	1 0	1C/-Jan. 16 '98	1 0 0	250,000		120, Bishopsgate-st.	in Est. & Dev.	99 I /	136 2	1 0	=	1 00	485,131 T	ransvaai	120, Bishopsgte stWn. 10, New Broad-st. E.O.
Beers Consol, D . 5 % 1st Deb . 5 % % Bul, Ob.	108% 109% 104% 105%	23% 24%xd 107% 108%x 104 105	5 0	15/- Jan. 16'36 5% Jan. 2'96	5 0 0	789,791 £3,500000	Kimberi'y	62, Lombard-street.	Gen. Assoc. Gold Exp.G Gold Fields	2% 3% 436 5 2% 3%	76 1 256 236 436 556xd 236 336	0 2			185,000 T 260,000 T 135,000 S	ransvaal .	30, S Swithn's lane. Suffolk House, E.C. 120, Bishopsgt-st. Wa
efontein	3/9 4/3	4/- 5/-	1 0	5% % Oct, '95	1 00	720,000 250,000 175,000	Doornkop	Warnford Court Winchester Ho,	Treasury	36 36	216 16	0	1214 % Sep.'91	1 00	79.915 T 60,000 H	ransvaal .	33, Corntill. Warnford Court.
rban Roodept. G Deep	336 4	1½ 1½ 6 6½ 3½ 3½ ½ 36 pm	1_0	3/- Dec, 15 '95	1 00	£125,000	-	28, Leadenhall-bldgs	U. G. F. of Manica Un. Ivy ReefG U. Langlaagte(N)G	8/6 9/6 34 76 156 134	8/6 9/6 1 34 74 1 1 134 1	0	236 Jan. '94	1 0 0	45,000 1	ransvaal .	Broad Street House, 110, Cannon-street, 85, Gresham Ho., M.C.
	13/16 11/16 9/10 7/16 5/4 5/4	5/10 7/10	1 0	Ξ	1 00	30,000 240,000 275,000	Barberton Kierksdrp Rand	54, St. Mary Axe. 52, Leadenhall Street 8, Old Jewry.	United Matabele Pioneer	36 36	34 1 1 1 34 76 1	0	=	1 0 0	75,000 A	frica De Kaap	19, S. Swithin's lane. 16, S. Helen's-pl., E.Q
Rand G	5 % 5 % 2 2 % 1 1 %	5 16 16 5 16 5 16 2 16 2 34 1 1 36	1 0	= 1	1 60	570,000 152,500	Rand	170, Winchester-ho. 120, Bishopsgate st.	Van Ryn G North	11/10 13/10		0 4	/- Jan. 18 '90	1 00	225,500 H	hodesia	13. George street,EG 18, St. Swithin's-in,
ploration	314 314	3% 3%	1 0 1	10% Jan. '89 1/- Dec. 28 '94 2/ Dec. 16, '95	1 0 0	66,000 148,000 216,215	B. Africa	28, Old Jewry, E.C. 30, S, Swithin's-ln.]	Venterskroon	3 316	256 376 1 136 136	-0	=	1 00	120,000	-	**
bes Reef (Nw)G	16% 17% % X	15/16 11/16 16% 17%	1 0	13/ Jy 26'95	1 0 0	45,000	Rand	120, Bishopsgt st. Wn] 45-6, Leadenhall-st.	Village Main Reef Vogelstruis Estate ,, Cons. Deep	534 534	3% 3% 1	0	=	1 00	177,000 R 200,000 327,750		8, Old Jewry. Winchester House,
Idenhuis DeepG Idenhuis Est. G	516 B	6 636 376 436	1 0	6/- Jy 26 '95	1 0 0		ransvaal.	10,8t. Swithin's-lane.	Wassau	34 34	136 2 36 36 1		=		190,000 G	-	147, Cannon-street
orge GochG	1 1/16 13/16 2 1/16 25/16 1 3/16 15/16	25/16 27/16 13/16 13/16	1 0	10% Dec. 95	1 0 0	150,000	**	120, Bishopsgt st. Wn I Warnford Court, E.C Johannesburg.	Western Nigel Westleigh	10 1034 36 1 36 1	956 976 1 76 156 1			000		and	19, Bury-street, [† Suffolk House,
d Coast Devel.	7/ 8/	7/- 8/-	-	214 % Dec. '35	1 00	130,000 I	rietfon .	Warnford Court, E.C. 1. Drapers-gardens. 1. Queen Victoria-st	West HandG	1% 136		0	-				3, Geo. St., Mans. Ro.
. Estates TG d. Pis. DeepG P. of Lydenb'rg	7 7%	756 736	1 0	16 % Dec.'89	0 10 0	600,000	. Africa	old Jewry.	Witwatersrand G	1% 1% 5% 6 7% 7%	556 576 1 756 776 1	0 1	Apr 26 '94	00 3		and	3, Copthall-bldgs, 19, Bury-st., E.C Warnford-court,†
F. of Lydeub'rg F. of Mashonid. sakop	4/3 4/9	36 36	5/- 2	%% Mar. '91.	1 00	200,000	ydenb'rg 1 Iashonld. 1 ydenburg 2	9, St. Swithin's-in.	WorcesterG	376 436	3% 136xd 1	0	-Jan 16 '96 1	18 0	39,021 Pr 90,727 R	and	Blomfield House. 8. Old Jewry.!
y Fawkes G	8 34 8 36 134 134 2/ 3/	8 8 % x a 1 136 136 2/6 3/	10/-	/ Jan 16, '96	0 10 0 0 10 0	105,700 T 24,000 h	fanica	, Tokenhouse Bidge 12, Lombard-street road-st. Avenue	Zambesia Explora.	356 336	3% 3% 1	0	- 1	0.0	85,000 Fr	ansvasi .	30-31, Ciement's lane
mony (Pref) G	1 134	4/6 5/6 1 1½ 36 36	1 0	=	1 0 0	260,000	felldelbg .	8, Bishopsgate st. 9 %, Gracechurch-st. 12, Gt. St. Helen's.			В	RIT	ISH MIN	ES.			
nderson's Trans nry Nourse G	36 36	14 34	1 0	=	1 0 0	250,000 Z 100,000 L	e Kaap	Narnford-court.	Blue HillsCT	1/ 3/	/6 1/-		2/- May, '81 2/6 Dec., '93	s. d. 6 19 5			Camborne.
's Reel G annesburg G.F	5/ 6/	71- 9/-	1 0	Ξ	1 00	57,404	. 2	5, Bishopsgate stWn 1, Mineing Lane. 1, Lombard st., E.C.	Cook's Kitchen T	/3 /6 % 36 15/ 20/	1/- 2/-	:	- 3:	2 8 5 5 15 10 0 12 6	4,900		Carn Brea. Camborne. , Pinsbury circus.
Annesburg Par	3 1/10 34/10 83/ 83/ 83/ 83/	39/16 35/16 834 834 834 834	1 0 12	0 % Oct. '95	1 0 0	850,000 H	and 3	, Lothbury, ohannesburg.	Devon Gawton CA , Gt Cons. CA Dolcoath	1 156 (15/ 10/ 1 20/- 22/6 5 15/- 16/- 1	0 1	1/6 May '95 3	0 0	10,240 D	evon	Amborne,
pers	6 % pm	376 736	1 0 25	New. 28 '95 5% Aug 29 '95 Jan 16, '95	1 0 0	30,000 100,000 98,672	12	Old Jewry.† O, Hishopsgt st., Wn! O, Finsbury circus.	Drakewalls CTM	4/ _ 5/	16 1/		_ pa	rt paid	61,856 12,600 F	intshire 6	Oashwood Rouse. 7, Lord St., Liverpli
vionteinD	136 136 15/3 15/9	11/6 2 12/9 13/3 11/16 19/16	10/-	=	0 9 0	125,000 400,000 E	lerkedorp	, Drapers-gardens. 110, Cannon St.	Sreat Laxer	20/- 25/- 256 3 134 234	20/ 25/ 1 21/4 3 13/4 21/4 4	0 5	/6 Sept, '94 0 /- Apr., '92 4		8,400 Oc 15.000 I.	of Man	llogan. louglas, Isle of Man,
giangte Est. G	15/10 113/10 536 576	536 534	1 0 2	25% Jan 95	1 0 0	226,500 L	uip. Vlei 1	, Gt. St. Helen's. 20, Bishopsgt st. Wn 9, Holborn Viaduct	Green Hurth L Halkyn L Do. Dis. Mn, Drain	9 10 10 11	9 10 1 10 11 10	0 3	/6 June '89 0 /- Dec. '95 1 % Aug. '95 10			intshire C	hester. orn Ex. Cmb, Chestr,
Btar	13/18 10/18 2 23/4 4/8 5/6	2 2%	1 0 r	ts. Mar. 6'95	1 00	170,000	" "	. Drapers-gardens.	KillifrethT	334 414 6/6 7/5	8% 4% 5	.0 1	/- Dec. '#5 5 /8 Nov., '94 5	15 6	6,000 Co	or Man Crnwall T	hester. ruro.
on-Berlyn G	5/3 8/9 2 256	8/3 5/9	2/6	=	0 2 6	883,233 50,20)	8	5, Gracechurch-st. luffolk House, . Old Jewry	Lianarmon	par par	1 1% 6 par 1 par 1	0 1/	Oct 16 '90 6		21,990 De		. Werburgh Chmbss Chester.
r Roodepoort	15/16 11/16 334 1434 1/6 2/6	1 156 13 14 1/6 2/6	10 4/	/- Dec. 20 '95	0 10 0	500,000 B	Africa 1	3, Old Broad Street.	Levant		3 4 1	. 4/	- Nov., '94 11	18 0	2,500 Co	bumbid. 5	enzance. ewosatle-on-Tyne.
enburg Estate.	19/16 13/16 19/16 13/16	13/16 13/16 13/ 13/4	1 0	8% Mar. '90	1 0 0	319,003 R	and 1	Varnford-court. 1 20 Bishopsgte stWn	Polberro	par	8/ 10/ par 1	0 10	pe Sept. 9	0 0	1.0 0 FI	intshire C	ornEx.Cmb.Chestr.
Reef (New)G	1 134 236 336	1 11/6 27/6 31/6	1 0	-		111,500 R		5, George St., MnH	S. Frances Untd. T	1/6 7/6 1/6 2/6 13/ 15/	17 27 36 36				6,000	" E	ool, Cornwall.
on. Agency	1% 1% 1	13/6 110/16	1 0	Ξ		250,000	ashonald 8	Old Jewry, E.C.	Talacre	par	par 1	0	- 0	15 0	20,000 Fi	intebire 8	. Werburgh Chmbrs t. Forgate st., Chstr arn Brea.
Central i Keest ibelel'd G. R'f	3% 1 9/8 10/6 354 4	-/8 1	10/	=	0 7 -	180,000 60,002 M	anica B	road Street Avenne	WeardaleL West FrancesT	% 8/9 6/ 7/	8/9 4 1/ 2/ 4	0 1	/3 Oct. '90 1	7 6 10 11	50,000 De	ruwall C	Lombard-court.
Con. (New) G 2 or & CharlG 5	% 8%	213 14 215/14 556 538	1 0 2	/- Oct 30 98	1 0 0		and 4	Copthall-buildings. Lothbury.[Crosby Square.]	Wueal Agar TA	3/ 5/	2 236 36 36	* Z/	/- Dec, '94 1 6 Aug. '88 23	2 0 15 2	8,000	: 3	7, Walbrook. edruth.
lie Viel	1 16	1 136	=	=	=	=	= 1	20 Bishopagt, st Wn		1/ 1/8		•	- 0	12 9	6,144 10,000 6,000		Copthall Bldgs.E.C.
derfontein G	1% 1% 8% 8% 1% 2½ 1% 1%	8% 9%	1 0	=		150,000 R	. 1	Vinchester House. 3, George Street 8, Austin Fries	., Kitty 7	3/3/6			- Mar. '88 4	5 6	8,590 60,000	11 T	ruro. I, Broad-street Av.
dles G.&E,G	36 34	11/20 13/20		/- Peb. '90 -/4 May '90	1 0 0		odderftn 1: Kasp 6:	10, Bishopsgate st 5, New Broad-street resham House. I			EU	TRO	PEAN MI	NES.			
African	336 3	13/16 13/16 15/6 13/6 33/6 33/6	2 0 2 1 0 20	/6 July '91 / Dec. 30 '95	2 0 0		E. Africa 13	3, Austin Friars. 2, Leadenhall-bids. 3, Hatton Garden.	stamtilosL	75 114	76.176	8 1	1	2 0 0	35,010 9	pain 6	, Queen-street-plate
lgium Land 1	1/ 12/	11/8 12/6 51/10 23/10 176 2	1 0	5 pe Aug. '95 % Feb.18 '95	0 17 0	167,462 W	aterberg. 3:	B, Cornhill. Old Jewry, E.C	19818Q	36 156 0 36 636 636	6% 6% I	0 3	/- May '93 1	0 0	81,584 B	ervia 4	Tokenho, Bidgs. 9, Grey-st.N'castle.
Comet G	276	236 236 1 1% 136 1	OP	te Apr 17 '95	1 00	175,000 H 255,000 L	nglaagte 1	7 Hishopsgt st. Wp] 7 inchester-house. 20, Hishopsgt.st. Wn	Fortuna L	1 136 276	1 156 2 236 236 8	0 2	8 Oct. 16 '95 8 /- Sept. 27 9: 5	0 0	25,008 B		Dashwood Ho., E.C.
Goldon	76 6/6 176 936 134 9	5/6 6/6 1 8% 9% 1 8% 3% 8	0 25	% Dec. '89 pc., Dec., '95	1 0 0	404,344 Gr 88,750 Re	riqualand 1: ind 90	6, Gresham Ho EC	Mason & BarryC	5 5% 2%	236 236 5	0 7/	Oct. 16 '95 3 May 23 '94 5	00	14,998 B 185,172 P	pain 6, ortugal 8	Queen-street-place.
Louis D'Or G	/6 2/6	3% 3% 1 1/6 2/6 1	0 12	/ Oct. 16 '95	1 00	82,500 R	anevaal. 5, and	New Broad-street	Pestarena	4/ 5/	4/ 5/ 3 1634 1634 10	0 11	/8 Dec. '94 20 /- Oct.30 '95 10		14,000 C	oueron	7, Queen-street-pl.
Midas	34 314	3% 3% xr 1		Jan, 16, '96 ipo.Dec, '95	1 00		d'ie Vlei 12	10, Bishopegt-st, W Draper's-gardens.	dipanji	101	98 100 100	0 47	Jan. 2, 'v8 100	19 0	3500,000 95,000 B	ervia 1	10, Bishopegt-st, Wn!
RietfonteinG 3	76 436 2/8 13/6	236 4 1 7/9 8/3 1	0	=		160,000 299,137 G	iqu'id w	Varnford-ct., E.C.	West Prus Pre,pref	476 536	436 8 2 - 10 10	0 8	- Apr 26 '14 1 7 Drc. 95 16 2 Dec. 95 16	0.0	365 G 5,450	pain G	lasgow. Valbrook Ho., E.C.
Spec BonsG 1 Steyn Estate 1 Virginia G 1	136 136 16 2/6	1% 136 1 1% 136 1 1/6 8/6 1	0	=	1 00 1	113,701 Ra 125,009 He	idelberg 1	H. M. John-st., L'pi.	Wohlfahrt m.mL	=	= 10	8 2	Z Dec. 94	0 0	14,050 99,634 ZI	ruist ,1	7, Victoria st.; # #
1	10	10 2/0 1	0/	- 1	0 10 0	48,785 77	insymmi , 20	Budge-row, E. C.	6 Ifelfitals	-	- 11	0 3	Dec, '94	19 6	8,080	"	H

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C. E.O West West Course to the Course to the

E.O. E.O. Wase. eet. E.O. lane. E.O. lane. eet. E.O. lane. E.O. lane. E.O. lane. E.O. t.E.O. t.E.O.

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"THE MINING JOURNAL" SHARE LIST-(Continued)

	AUSTR	ALIAN	AN	D NEW	ZEAI	AND	MINES		AUS	TRALI	MIN	ES—(Conti	nued).				
Name.	Closing Price. Jan.31,1896.	Closing Price. Jan. 24, 1896.	Am't. of Share	When last XD and Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office		Closing Price, Jan.31,1896	Closing Price. Jan. 24, 1896	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Scares Issued.	Situation of Mine.	Head Office
Abbotts2/6pm.pd.G	36 36 2/ 2/6	34 34 1/6 2/	£1 0	=	20 15 0 0 2 6	67,000 642,456	M rehison N.Zealand	17, Old Broad st.	W. A. General "Australian G.F. " Aust. Mining " Aust. Pioneer.	3% 6% 6% 6% 8/6 9/6 2 2% pm	41/4 4 14 pm 63/4 63/4 8/ 9/ 23/4 23/4 pm	1 0	4/- Dec 16'95 /5 Oct 16 95 rts Oct 19 95	0 14 0 1 0 0 1 0 0 0 15 0	65,000 104,141 19,993	W. Austral Coolgardie W. Austral	28, St. Swithin's-in. 28-29, 257, Winchester Ho, 139, Cannon-street,
Anglo-French Exp	1% 1% pm 1% 1% pm	1% 1% pm	1 0	1/ Feb. '96 5/- Oct 30 '95 5/ Oct, 20 '95	1 0 0	99,000	N.S. Wales W. Austral	4-6, Throg. Avenue. 79, Queen Street.	, Share Corp.	% % pm % % dis	13/16/15/16 pm 30 % dis 2% 3% pm	1 0	15/ Oct. 30 '95	0 SC 1 0 0 1 0 0	50,000	19	28, St. Swithin's in 54, Old Broad Street 3, Princes Street.
Airow BrownhillG	111/10 113/16	19/16 111/16	1 0	-/4 Dec 28 '94	1 0 0	80,000 375,000 86,000	Coolgardie Murchison		West Boulder Westralia	A7'18 A74	A 478	1 0	= 1	1 0 0	=	Contendio	Winchester House.
AustralasianG	3/ 3/6	2/6 3/6	1 0	-/6 Mar., '92 -/9 Aug. '95	7 7 6	18,315	Queensind S. Austral,	6, Queen-st, place 15, Old Jewry Chbrs.	White Feather , United Whitehe'd&Sultan	236 236 36 36 36 36 36 36 36 36 36 36	2½ 2½ ¾ ½ ½dia ½pm	1 0	Ξ	1 0 0 0 0 5 0	60,000 75,000 150,000	Coolgardie	28 & 29,8, Swithin's In 139, Cannon-street 13, Abchurch-lane.
Baker's CreekG	1/3 1/9 1/4 1/4	1/3 1.9 % ¾ % 1	1 0	1/- June, '91 1/- May '95	1 0 C 0 17 6 1 0 0	522,708 -103,000	N.S. Wales N.S. Wales W. Austral	Dashwood House. Hiligrove, N.S. Wale. 43, Threadneedle st.	Zapopan	5/- 6/-	4/6 5/6	1 0	-/4 Dec. 95 214 Dec. 95	1 0 0 0 0 2 6	25,000 66,000 12,000	NWAustra Tasman is	70. Bishopsgate-street 11, Queen Victoria st
Bayley's Reward G Big Blow Blackett's Claim G	6/ 7/ 56 34 36 34	5/6 6/6 34 34 34 34	1 0	-/4 Dec. 94	1 0 0	480,000 145,000 55,000	Coolgardie	F'sb'y. H. Bi'mf'id St. 151, Cannon Street. 16, St. Helen's Place.	7 7		NOR	гн	AMERICA	N M			
Blagroves Freehld	2/6 3/	13/16 11/16 2/6 3/ 7/ 7/6	1 0	Ξ	1 0 0 1 0 0 0 18 6	140,000 120,000	Acek. N.Z N.Zealand	1, Metal Exch. Bidgs Dashwood House. 16, S. Helen's Place	Alaska MexicanG	1% 1%	1% 1%	\$5	4 4-5d. Feb.,96	\$5	160,000	Alaska	30, St. Swithin's-in
Brilliant	136 136	7/ 7/8 11/18 13/18 13/6 13/6 13/6 2	2 C 1 0 10/	-/4 Nov 28, '98 -/6 Dec 16 '95 t/ Jan 16 '96	2 0 0 1 0 0 C 10 0	250,000 70,000 72,000	Queensind	Charters Towers. 16, S. Helen's Piace Charters Towers.	Almada and T S American BelleS	1% 1% 5% 5% xd -/6 1/	1 1/4 1/4 5 1/4 5 1/4 1/6 1/ 1/3 1/9	\$25 2/6 1 0	1/6 Dec 24, '95 -/6 Mar. '91	0 2 0 1 0 0		Mexico Colorado	6, Queen-street-place 25A, Old Broad-street
Brit. Brok. Hill S	13/ 14/	11/16 %	1 0	=	1 0 0 0 0 8 0	240,000	. B.Wales	Dashwood Ho., E.C.	Anglo MexicanS Arizona (Pref.) Cu	15/ 17/ 47/ 47/6	15/ 17/ 42/9 43/ 105	5 0	2/~ Dec.30 95	5 0 0 4 0 0 100 6 0	74,850	Mexico	23, College Hill,
Britons United G Broad Arrow Broker: Hill Prop.S	2/9 3/3 2/5/16 31/16	2/6 3/ 213/16 15/16X	5/	1/- Jan. 16 '96	0 4 6	960,000	N. S. Wales		" 7% B Deben.	90% 91	9036		1/- Aug. '95 % % Oct. 30'95 7% Oct. 30 '95		£181,300	7400	"
Brownhill Propty.	1½ 1½ ½ 1	74 1%	1 0	=	1 0 0	120,000	Han, W.A. Coolgardie		Dickens Custer GS	19/6 20/6	19/6 20/6	1 0	1/- Oct, 30 '95 -	0 18 9	420,000	Idaho	6, Drapers-gardens. Winchester Ho. E.C.
CaledonianG CaringtonG Cashman BrilG	1/6 2/6 2/ 3/	1/6 2/6 2/ 3/	12/6	Ξ	0 12 6	120,000 100,007 55,128	W. Austral Queensind Coolgardie	Portland House. 9, Tokenhouse Yard. Winchester House.	Dorie	3/- 4/-	2/ 3/	5/	-	0 50		Colorado	
Cassidy Hill House	136 136 34 36 136 136 4/6 5/	15/16 11/16 15/16 11/16	1 0	Ξ	1 0 0	115,000 100,000 122,000	W.Austral	4, Ploardy Pl., Edin.	Elkhorn Priority 8	par Kpm,	634 734	5 10	-/3 June 26 '56	5 10 0		Montana C. Breton	8, Draper's-gardens. Blomfield House.
Cusffers	/3 /9	/3 /9	10/	=	0 9 0	300 000 200,000	Queensind	2, Met. Exchg. Bldgs 54, Old Broad-st., E.O 110, Cannon Street	Gen. M'g. Assoc, Golden Feather G , GateG	8/6 9/6 2/6 3/6	8/6 9/6 3/ 4/ 1/3 1/9	1 0	=	1 0 0 0 19 6 1 0 0	180,000 79,600	California	8: Stephens Os B.O. 8, Draper's Gardens.
Colonial Finance	4% 5% pm 1% 1% pm	1% 5% 1% 1%pm	10/	rta Oct 19 '95	0 10 0 0 12 6	300,000	W. Austral		Harquahala G	6/5 7/6	6/ 7/	1 0	~/8Nov.14,'94			Arizona	6, Draper's Gardens,
Con. G. M. of W. A. Murchison	% % % % % % % % % % % % % % % % % % %	is The	1 0	Ξ	1 0 0 1 0 0 0 15 0	90,000 250,000 65,000	Murc., WA	30, Moorgate Street. Broad Street House. Bishopsgate House.	Holcomb Valley G	1/- 1/6	1/ 1/6	5/	-	0 5 0	540,000	California	14, Cornhill, B.C.
Conti. & W.A. Trust Coolgardie Gold Mining G	1/ 2/	13/16 13/1 13/6 13/6		1/ Dec. 33 '95	1 0 0 0 5 0 0 1 0	64,010 100,000 40,000	W. Austral Cool. W. A. Coolgardie	Broad Street House. Broad Street Avenue. Winchester House.	Jackson Goldfields	/9 1/3	/9 1/3 3/ /9	5 0	-/6 Dec. '92	0 5 0	408,635	California Montana	11, Poultry, E.C. Dashwood House,
mint & I.Kg.	1/16 11/16	1 134	1 0	-/3 June 94	1 0 0	150,000	Queensind	30, S. Swithin's in.	La Piata	-/3 /9 1/ 1/6	1/ 1/8	5/	1/3 Oct. '82	0 4 6	405,000	Colorado Mexico	11, Poultry, E.O.
Orowa Bayley's, G United umbrind (New)G	1/16 3/6 pm 3/16 1/16 pm /3 /9	1/16 1/6 pm 5/16 7/16Pm	1 0	2/6 Dec, '87	0 10 0	75,000 184,490	Coolgardie Queensind	Bishopegate Ho. E.C. 110, Cannon-st., E.C. Blomfield House. II C	Montana GS	2/- 2/6 7/6 8/6	7/6 8/6	1 0	-/3 Dec. 30, '98		857,158		Gresham House, E.O.
Day Dawa B.AW.G	9/8 10/	9/3 9/9 2/3	1 0	-/8 Nov. 14'95 -/6 Apr. '92	1 00	498,400		16, 8, Helen's Place Winchester Ho., E C	New Guston8	14 16	14 34	1 0	1/- Oct. '92	1 00	110,000	Colorado	25A, Old Broad-st.
Parlahawk	1/6 2/6	1/6 2/6 1/6 3/6	1 0	=	0 18 0	120.000	Victoria W.Austral	30-31, S. Swithin's in	PalmarejoGS PinosAltos(Df)GS	/6 1/-	1/ 1/6	1 0	-/8 Mar.' 90	1 0 0	100,000	Mexico	32, Old Jewry, E.C. 110, Cannon-street.
Emeraid	1/10 1/6 1/6 1/4 1/6 1/4	16 16	1 0	Ξ	0 10 0	65,000 90,000	Murc., W A Coolgardie	Finsbury House, EC 2, Tokenhouse bidge	Richmond GSL	36 %in	36 %is	5 0	1/- Dec. 16 '95				44, Coleman-street.
Explorers Synd	34 % pm	% ¾ pm	1 0	-	0 5 0	9,000	W.Austral	Copthall House	St. George	1/ 2/	1/ 2/	5/	-	0 45	}	G'o'giaUSA	
Fingall E'fs, Extd	136 236	1% 3%	1 0	1/4 Jan. 16,96	1 00	150,000	10	18, St. Swithin's In	Bierra ButtesG Do. Plumas Eur. G	36 36 36 36	% % % %	2 0	-/6 Oct. 30 '95		140,265		138, Leadenhall-st.
Gem of Oue	3/8 4/6	3/8 4/6	1 0	Ξ	1 0 0	45,030 300,000	M urc.W A N S W ales W. Austral		SpringdaleG	1/- 1/6	1/ 1/8	81	-/2 Bep. 28, 9	\$1	1.000,000		20, Abehurch Lane.
Gladiator	1/6 2/3 1/6 3/3	1/9 2/3 5/18 7/16	1 0	=	0 8 0 1 0 0	225,000 68,086	N. Zealand	3-5, Queen-st. H.O.	Twin Lake Placers	1, 1%	1 1%	0	3/- Feb. '95	1 00	28,000		6 , Lawrence P. Hl. B
Golden Cement G CrownG GateG	156 136 /8 1/6	156 134 /6 1/8	10/	Ξ	1 0 0	100,000 150.000	W.Austral W. Austral Queensind	9, Tokenhouse Yard		SOUTI	H AND	CE	NTRAL A	MER	ICAN	MINES.	
LinkG	1 1%	15/10 11/10 1% 136	1 0	5/- Oct 30' 95	1 0 0	90,000	W.Austra:	Dashwood House 4, Bishopsgate Street	Anglo-Chilian PfN	9 954 104 106	8% 8% 104 108	10 0		6 100 0	35,000	Antofagat.	123, Bishope, st. W,
Gold Estates	216 234 516 516 116 156	556 576 136 136 136 136	-	3/ Dec 30 '95 2/- Dec 16 '95	1 00	240,000	Yilgarn	42, Greeham House. 3, Gracechurch st. Worc. Ho., Waibrook	B. Guiana Prosp. Caratal G	-/6 1/	-/6 1/	2/6	25% Oct. 95	0 21	8 1,330,000	Brit.Guan	57. Moorgate-st. E.O
Junction M'n R'fs Fingall Rfs.	1% 1% 1% 1% 1% 1% 1% 1%pm	1% 1% x 1% 1% x	1 1 0	57 Jan. 16, 96 4/- Oct 30 95	1 0 0	240,600 175,000 50,000	Kurnalpi W. Austra	3, Princes Street. Broad Street House. 13-14, Abchurch in.	OayllomaS ColonG Colorado Nit,N	-/8 1/ 134 254	-/6 1/	5/	1/- Apr. 94 2/6Dec.16,'98	0 4	200,000 32,000	Peru	57, Moorgate-st, E.O 52. Leadenhall street 5, Copthall-bdgs., E.O 12, King-st., Liverp'i
Greeham Synd Hainault HamptonGoldFids	156 176	136 176 36dis 36pt 1/ 1/6	-	Ξ	0 10 0	Ξ	=	82, Gordon st., Glas. 9, 8. Mildred's Ct.	Colombian HyG	26 36 2 2 X	1 1%	1 0	10 frs. Aug. 94	1 8	75,000	Venezuela Colombia	10, Blomfield-street
LaRysy Piains	656 676 436 436	454 434 8/6 9/6	1 0	=	1 0 0	300,000	Coolgardie	15. Geo. St., Mns Ho 93-94, Gracechurch st 29, S. Swithin's lane	Darien "A"G	336 356	356 376	1 0	2/8 Dec. 16 '98	1 00	49,553	Colombia	Dashwood House, N.O Manchester.
Hannan's BrwnHil ,, Main Reef	636 656 9/10 11/10 136 136	27 736 36 34 136 134	10/	=	1 0 0	85,000	Coolgardie	Suffolk House, B.C. Broad Street House. 18, St. Swithin's in.	Darien "A"G "B"G Don PedroG El CallaoG	5% 6 /9 1/3	/3 1/3 34 36	1. 0	9%d. Feb. '9	1 0 0	133,102 267,600		24-5, Devonsh.CsE.O 8, Bishopegtst, Wn
North	1 136	1 116	1 0	=	1 00) E	**	Dashwood House, 20, Bucklersbury	Frontino & BG GlenrockG GravelG	1/16 13/16 1/19 2/3 2/- 3/-	1/9 2/1 2/ 3/		6d. Jan. 16 '96	1 0	0 128,662 0 199,948 0 100.000	Arg. (&I.)	184, Gresham House 3-5, Queen-street, E.O 10, Biomfield-street
Prop G	3% 3%	36 136 ps 336 336 156 136	m 1 0	=	1 0 0	70,000	Hann.WA	139, Cannon Street, Barthelomew Ho, Finsbury House E.C	GuadalvpeGS	3/6 6/-	3/6 5/	1 0	-	1 0	120,000	Honduras	14, Union ct.Old Brd
Hauraki G Hawk's View G Idaho GS	8/8 8/9 13/16 15/16 6/ 7/ xd	8/ 8/6 xd 13/16 15/14 8/6 7/6 x	1 0	1/ Jan. 16 '96 -/6 Jan., 16 '96	0 26	250,000 40,000 143,439	W. Austra W. Austra	Dashwood Ho.; E.C. St. Swithin's in.	Julia TaltalN	% % av	1/10 1/10	1 0	15p,c,Dec.'94	5 0 0	105,234	Hicaragua Tarapaca	139, Cannon-street. 3, Gracechurch st;
KaboongaG KalgurliS KangarillaS	1 4/4	176 256 5/- 6/-	10/	=	1 0 0	249,250 34,0 0 87,938	Queensind W. Austra So. Austra	70-71, Bishopsgate st 20, Threadnesdie-st	LagunasN LiverpoolN	8 9	51/ 53/	5 0	5/- Dec. 30 '98 15/-Dec 18, 98	5 0	0 110,000	Ohili	70. Liverpool. 6. Copthall-buildings
Kinsella	%10 %10	1/1 7/6 1/16 9/16	1 0	rts May 24 '95	1 0 0	249,760	Murchison	9, New Broad-street. 33, Broad-st. Avenue	London NitN	-/6 1/- 1% 2 3% 4%	/9 1/3 11/4 2 21/4 31/4	3 0		5 0 1	10,000	Chill	9, Gracechurch-st
Kintore	3/ 3/8	2/6 3/6 3/6 3/6 3/6 25/6 27/	5/-	=	0 50	=	W. Austra Ha'raki, N.Z Coolgardie	Dashwood House. Throgmorton House	Macate	2/ 2/6	1/3 1/9	2/	-	0 2			
Mary Amalg.	1% 1%	256 276 136 13 27/14 29/16	1 1 0	Ξ	1 0 0	70,000 46,000	Murchison	9, Tokenhouse Yard, Finsbury House.	New Tamarugal N , 8 % Cum Pref , 6 p.c. Debs	36 36 36 37 82 87	% % % % % % % % % % % % % % % % % % %	1 10	1s. Dec. '96 8 p.c. Feb, '96 6 p.c. Aug. '98	1 10	130,000		50, Lime-street, B.O
LakeView& E.Bldr	36 34	236 236	1 0	-/6 Jan. 2 '95 2/ Jan. 16 '98	0 7 6 1 0 0 0 15 0	65,000	Coolgardie W. Austra		OritaG	1/3 1/9	1/3 1/9	1 9	1/- April '89 1/- Feb, '96	1 0 0	30,000	Colombia	10, Blomfield-street 8, Queen-street-place
Lon, & Globe Fin. LondonderryG L.& W. Aust. Expl.	1 178 4	7/8 8/6 115/16 21/1 256 236	1 1 0	4/-Nov 29 '94 4/ Oct 16 '95	1 0 0	467,000 270,100 100,000	W. Ausrali	3, Gracechurch-st.	Pac. & Jaspampa N	2 24	156 2	5 (4/- May, '95	5 0	72,000	Tarapaes	3, Gracechurch-st.
Mainland Cons. G Maillea Gold	36 34	13/16 15/16		=	1 0 0	150,000 89,000	Murchison W. Austra	49, W. Geo. St., Gias	PrimitivaN	36 36	36 36 36 36	3 (3 0			
Mawson's Rewrd. G Menzies Gold Est. ,, Gold Reef	156 156	134 136 156 134	1 0	=	1 0 0	175,000	**	28 & 29,8.8 within's in Broad Street House 25a, Old Broad Stree	RosarioN	5% 5% 104 107	4% S 104 107	5 (S 0	£475,000	11	57%,OldBroad-stree:
Milis' Day Dawn G	11/16 13/16	par 36 pr	1 0	-/6 Aug 29'85	1 0 0	100,493	Queensind Cool., W	Bishopsgate House	Do. Huara Deb Scrp St. John del Rey G Sau DonatoN	103 108 19/16 11/16 1 156	103 108		2/6 May 24 '95	6 0	327,650	Brazil	12, King-et., Liverp
Mosman	2 216	3/3 3/9 2 1/6 2 1/6 2 18/16 2 13/16	1 0	-/6 Jan. 16'86	0 19 0 1 0 0 0 17 6	1,600,000	W. Austra Queensind	28, 8t. Swithin's In.	PabloN	214 234	134 54	6 0	5/ Oct. 16 '95 5/-Oct. 30 '95 5/ May 24 '95	5 0 0	75,000 0 32,000 0 29,000	94	9, Gracechurch-st. DashwoodHoouseEO
Murchison Gift	6/6 7/6	6/5 7/8		1/- Oet 30 '95	0 10 0	120,000	Muro, W.A		Santa Barbara G	196 176 36 36 236 3	134 134 34 34 2% 3%	10/ 5 0 5 0	1/3 Dec.'86 5/- Nov. 15 '9	5 0	0 60,000	Brazil	Liverpool 3, Gracechurch-st. DashwoodHouse, E.O
N. Australian G. F. Hauraki Props.	3/ 4/	136 156 136 159 3/ 4/	5/	-	0 19 6	20,000	Ha raki, N	7, Union Court. Z Dashwood House.	SegoviaG	-	274 374	5/-		0 5	120,000	Colombia	5, Coptha'l-buildings
North Boulder Coolgardle	6/3 6/9 /9 1/3	6/6 7/6 8/6 7/6 1/ 1/6	10/-	-/6 Sep 12 '95	0 10 0	400,00	W. Austra Pilbarra	18, Helen's Piace 228, Winchester Ho.	Tolima "A"8	6 6% 5	416 5	5 0				"	18, Finsbury-circus.
" Fingali Roofs " Kalgurii " Q'id. M. Agency	36 34	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 0 1 0	30 % Aug. '95	1 0 0	-	Queensind	11, Abchurch lane	Vic. & Altamira	/6 1/-	/6 1/	5/		0 5	200,000	Venezuela	Broad-st. Avenue.
Omnium GM Associ Paddington Cons. Pilbarra G. F.	15/10 11/10	15% 1%	4 1 0	=	1 0 0	100,000	Pilb, W. A	Broad-streeet House 77, Bishopsgate-st. 38, Coleman-street.			INDIA	N A	ND ASL	ATIC	MINE	IS.	1
Queen's Bthdy Un.	5 6 pm	4 5 pm 2/6 3/	6 -	Ξ	1 0 0	75,000 50,000 200,000	W. Austra N. Zealan	7-8, Gt. Wnchster St 4, Bishopsgate-st. d Dashwood House.	Balaghat MysoreG Burma RubyR	2/6 3/- 9/10 13/10	2/6 3/	1 1	9 =	0 19 0 18			
Royal Oak	2/6 3/	5/3 5/9	1 0	=	0 8 0	60,000		8, Old Jewry, H.C.	ChampionReefG	\$11/se 513/	Sa 536 576 :	rd 1	5/- Jan. 16 '9	6 1 0	0 220,00	India	E-7, Queen-street-pl. Dashwood Ho., E.O.
ScottishAustralian Scotty's Hauraki So. Londonderry Stray Shot & Exc	1/6 2/	1/6 2/ 3/ 4/	5/-	-/3 Aug., 95	0 2 0	200,000	N. Zealan Cool, W. A	d 5, Drapers gardens	Coromandel G	13/10 13/10				0 17	8 95,00	0 "	6-7, Queen-stplace
Town Prop. of W A	136 136	4/ 5/	10/	Ξ	1 10 0 0 5 0 0 15 0	90,000	N.Zealan	al 28-9, S. Swithin's-In	GoldFldsMysoreG KempinkoteGdFd	2/ 2/6	1/3 1/9	5/	-	0 3	6 750,00	0 India	. 6-7, Queen-stplace.
Victoria Associata Victory	136 2	11971s 217	11 0	-/3 Feb. '96 -/3 May, '94	1 0 0	144,000	Ohr, Tow	Dashwood House, 6, Crosby-square 32, Gresham-st., B.	Mysore	1/- 1/6 8/6 9/8	9/ 1/8	1	0 2/6 Oct. 30 '6	0 18	0 100,00	10 00	6-7, Queen-street pl. 2, East India Avenus 6-7, Queen-street-pl.
Waitekauri	336 376	5% 5% 5% 3% 3% 87 7/6	1 10/	2/- Dec 16 '90	1 0 0	180,000 136,000 130,000	N. Zealan	63, New Broad St.	West(N)G Wynaad G	134 1%	156 136		0 rts. Jan. 18 7	0 10	0 125,00	00 00	2, Gt. Winehester St 5-7, Queen-street- in
Waratah		6 196 136 196 136 196 136	10/		0 10 1	100,000	W, Austra	Z 43, Threadneedle st	RundydroogG	27/14 27	1/8 2/3 23/4 2/3 211/4 214 31/4 3/4 3 3/4 3/4 3 3/4 3/4	1 1	0 1/6 Wow 14 1 0 3/- Dec, 16 1 0 3/- Dec, 16 1	95 1 0 95 1 0	0 145,00	11 10	99 99
W. of Mations	1 196				5 1 0	500,000	1	77, Bishopsgate-st. 4-6, Throgmort, Av.	(10 % Pref.) (10 % Pref.) Pauang Kabang	3 336 3/10 3/10	3 33/ 1/14 9/4	i	0 3/- Dec. 16,7	1 0	0 12,90	Malay P	4a, Jeffrey's st. E.C.
W. Anst. G.Conce W. A. Ez. & Fin	396 396	313/163 15/	1 I	2/ Bept 27 '9 5/- Jang16 '9	1 0	200,000	H. Austr	33, Old Broad st., E0	Yerrakonda				-	1 1	6 187,4	Mysore .	#-7, Queen-street pl,

ASHANTI AND THE GOLD COAST.

By THOMAS CORNISH. M.A.I.M.E., Author of "Our Gold Supply," &c.

Now that the military expedition to Kumasi has ended in a peaceful submission of the West African potentate called King Prempi, it would be as well to consider how best to utilise the country for the benefit of the Ashanti people and advantage to England. This well-provided and well-managed expedition has had its victims to climatic influences, and all will deplore the less of H.R.H. Prince Battenburg by death from fover caught on the upward march, with that of will deplore the less of H.R.H. Prince Battenburg by from fever caught on the upward march, with that of of his comrades who have succumbed to the evil effects of the Gold Coast climate.

of the Gold Coast climate.

During my gold prospecting expedition to the West Coast of Africa in 1881 I experienced a severe attack of the malarial fever, and, therefore, know well what the effect is like on strong men. Fortunately, I foll into the hands of a good Samaritan—Dr. Burke—then living at Effuenta, whose skill and kind attention pulled me through. Some exceptionally strong men withstand the climate for many years, and even thrive on it, but most men suffer more or less. Many succumb, while many others feel the effects for years afterwards. One of the first industries I noticed after landing at Axim was a native carpenter making a coffin. I enquired who it was for, and was informed he was making on speculation for white men. I thought this rather suggestive, as my party consisted of only six thought this rather suggestive, as my party consisted of only six white men, and the white population of Axim, before our arrival, counted only six. It looked very probable that one of the dozen would soon be needing this final receptacle of humanity. If the Ashanti country is to be of advantage to England it should be

Ashanti country is to be of advantage to England it should be annexed at once, instead of merely proclaiming a protectorate over the place. From what I have seen of the country between Axim and the Tacquah gold fields I am satisfied that there is a vast amount of auriferous country that can be profitably developed around there, and right away through to Ashanti.

The chief attraction to the Gold Coast is to get gold; no one goes there for pleasure, or for a sanitorium, and, therefore, the attention of the Government should be first devoted to easy and fairly quick communication from the coast inland by a system of light railways that can be economically laid down, and the light trucks or passenger cars can be run by natives. If the indemnity to be paid by King Prempi be expended in the construction of roads and light tram or railways, it will be the best use to which the money can be put. Without waiting for construction of roads and light tram or railways, it will be the best use to which the money can be put. Without waiting for the construction of the ordinary heavy road with engines and trucks, I would advise now as I did on my return from there in 1881, that the roads should be made by a special form of longitudinal rails and sleepers combined, which can be laid cheaply and quickly. Ashanti should be tapped by two routes, one from Cape Coast Castle, and the other from Axim. The rivers Ankobra and Prah should be utilised as much as possible. A little labour and dynamite would remove some of the boulders and spage higher up the rivers hefore getting to and from and anage higher up the rivers before getting to and from Tomento, while similar means can be adopted for removing

Tomento, while similar means can be adopted for removing obstructions on other water-ways.

Kumasi is no doubt a good centre to make for, either from Cape Coast Castle or Axim, or from both places, and by taking it from both places two tracts of country widely separated will be well served. If only one line is decided on, then Axim should be the starting place, tapping all the best known gold centres on the way. There are many well known places between Axim and the Ashanti border that contain rich auriferous deposits that can be turned to profitable account as great gold-producing centres if tapped by a light railway. These places will give profitable employment to large numbers of natives from the aurrounding States, who would prefer working in the gold mines as free men under British protection, and thus be kept quiet and peaceable, thum be left to the tender mercies of their native chiefs.

As the several new gold fields would be opened up by the means of easy communication thereto by rail, so would arise new centres of population that would create trade and industries. The Gold Coast natives, Ashantis, and the Kroo boys along the coast make very good workmen, are easily tanght, and tractable. I took a number of natives picked up at different points along the coast with me to Axim when I went there to prospect some gold properties in 1881, and found them there to prospect some gold properties in 1881, and found them very apt to learn how to do their work, although none of them had ever handled any mining tools before. I also found them obedient and civil.

obedient and civil.

In opening up the Gold Coast and Ashanti for gold mining, an ample supply of native labour will be always available, and many of the more intelligent men can soon be taught the principles of mining and mechanics, so that few European supervisors will be needed. It is to this purpose that the chiefs and head men of the various districts should be advised to have their sons educated in the knowledge of mining and the

have their sons educated in the knowledge or mining and the treatment of refractory ores.

On my return from the Gold Coast in July, 1881, and reporting favourably on the general prospects of the place for profitable gold mining, a considerable rush and furors set in for obtaining concessions and forming companies, but very little legitimate work was done. Everything was on the principle of hurry-sourry to make a market for shares. Many incompetent persons were sent out to take charge of mining companies and direct the husiness arrangements, who were quite unsuitable persons were sent out to take charge of mining companies and direct the business arrangements, who were quite unsuitable for the work or the climate. My advice was unheeded, because it did not blend with the views of directors and promoters of companies. The consequences were they squandered large sums of money in doing a lot of useless and unnecessary work on a bad system, and brought the companies to grief and themselves into disfavour, and through their incapacity brought discredit on gold mining generally on the West Coast of Africa.

The rush, as will be remembered in the early eighties, ended in mamerous wretched flascoss, loss of life, and much loss of money, absolutely wasted through the bad management and

money, absolutely wasted through the bad management and incapacity of those who had the presumption to undertake the control of an industry which required practical knowledge and experience to develop gold mines successfully in such a climate and under conditions somewhat exceptional.

In going up to the Tacquah gold mines I passed over a good deal of country that showed every indication of being auriforous, and from the development of the mines in that district and the prospects obtained, there can be little doubt that, under efficient management, the mines could be worked at good profit.

If the requirements of the gold fields be attended to, and the British Government annex the Ashanti country and initiate a good form of native Government, and assist in opening the country by laying down light lines of rail or transpays, as I have succested, the West Gold Coast of Africa can soon be made a large producer of gold, and afford profitable employment to many thousands of the native inhabitants, and materially increase the tradeland commerce of the animtry. It is in the opening of the gold solds and commerce the form management that peace and presperity will be ensured to the various

tribes and races of inhabitants on that coast, and make it a valuable appendage to the British Empire.

The present system of transport by native bearers is a great waste of energy, loss of time, and loss of money, and retards the development of the country which can be best remedied by connecting the gold fields to the coast towns by a few cheap lines of rail or transcoads, that for the most part can be worked by native labour, and the distance from the coast to Kumasi could be covered in days instead of weeks.

THE USEFUL MINERALS OF TASMANIA.

By A. MONTGOMERY, M.A.

THE distribution of the useful minerals of Tasmania is so closely connected with the geological structure of the is and that it will be convenient to briefly recapitulate the principal facts of its geological history, before describing the ore and other deposits. In many cases the premit features are very puzzling in the absence of knowedge of the structure of the districts in which they are o and; and in all cases it is of benefit to mining engineers to be

equainted with the main facts of the goological history of the gons in which they have to carry on operations. Moreover, a speculating as to the origin of lodes or other deposits, we have constantly to refer to the crumplings of the earth's crust by mountain-making movement, and to the igneous rocks which are been thrust through the other strata, to explain the origin of the lode figures, and this discussion cannot be carried on without knowledge of local geology.

The oldest rocks yet met with in Tasmania are of archeon ge, and consist of highly crystalline quartzites and micaceous schools. They are most extensively developed towards the western side of the island, forming a belt parallel to the West of the Socrop out here and there to the west and northward of this belt, where the covering strata of later age have been denuded away. Though not seen in situ in the eastern part of the colony, the abundance of pebbles derived from this formation in the conglomerates of the coal measures shows that it must in those days have formed land surfaces there also, and makes it likely that the archeon strata exist at an great depth below many of the beds of later age now occupying the surface. Lying uncomformably upon these highly measures in the surface. Lying uncomformably upon these highly measures in the surface.

al-o, and makes it likely that the archean strata exist at so great depth below many of the beds of later age now occupying the surface. Lying uncomformably upon these highly metamorphic strata we find next an extensive series of subcrystalline metamorphic conglomerates, grits, and stones, slates, and limestones of Cambro-Silurian age. These are well seen in the Gordon River basin, along the West Coast range, along the North Coast, and in the gold fields of the north-eastern portion of the colony. They are much broken by later intrusive rocks, and covered by younger formations, but the series is spread, more or less, over the whole island. After these strata had been deposited considerable earth movements must have taken place, causing them to be trongly curved and folded, for there is great unconformity between them and the next formation, which is most probably of Upper Silurian age, best seen in the Queen River gold field, and in the silver fields of Zeehan, Dundas, and Heazlewood. The Middlesex and Bell Mount fields, probably, also belong to he same age, but the formation, though well developed along the western slope of the West Coast Range, does not show extensively in the eastern districts of the colony. It is interesting to note that here we find the first signs of volcanic action in the island, felsitic and dioritic tuffs and breccias being neerstratified with the ordinary marine sediments at Lynchaction in the island, felsitic and dioritic tufts and breecias being n'erstratified with the ordinary marine sediments at Lynchford, Zeehan, and Dandas. These may be the first results of a period of strong volcanic action which next set in, for we find that the three above-mentioned older formations have been penetrated by large intrusive masses of cranite, forming the Blue Tier, Mount Cameron, Mount Stronach, and other hills in the north-eastern district, and the Magnot Range, Meredith Range, Mount Heemskirk, and Granite Tor, in the western part of the country. At Ball Mount and Zeehan it is pretty certain that the granite is intrusive through, and, therefore, younger than the Upper Silurian bads; and from its lithological similarity throughout the whole island it is hardly likely that there is much difference in the age of the dykes in the different districts, so that probably the whole of it is not older than Upper Silurian. It is, however, older than the Permo-Carboniferous period, for the strate of the whole of it is not older than Upper Silurian. It is, however, older than the Permo-Carboniferous period, for the strata of this age often lie directly upon the granite, and contain waterworn boulders derived from it. Of much the same age as the worn boulders derived from it. Of much the same age as the granite, though probably rather young r, is another igneous sormation, the serpentine seen at Trial Harbour, Comstock, Mount Dundas, Heazlewood, and at Anderson's Creek, near Beaconsfield. This is, like the granite, intrusive through the Upper Silurian strata of Zeehan Heazlewood, but so far as I know there is no direct proof of its being older than Permo-Carboniferous, though the re is a very strong presumption that such is the case. Neither do I know of any section that would prove certainly the relative ages of the granite and the serpentine.† It may be that the former represe to the evil or acide, and the latter the

that the former represe to the early a acid c, and the latter the later basic products of one and the same volcanic period. The next great series of rocks in succession were formed during a period of time extending from the Permo-Carboniferous to Mesozoic, during which Tasmania was probably more or less complet by covered by the sea. The strata then formed have since been greatly elevated and faulted, and are now found at all altitudes from below sea level up to over 4000 feet elevation. A small patch near the mouth of the Henty River shows that these beds extended to the West Coast, and remains of them are found under the greenstone sheets capping several of the ranges and peaks of the Western Highlands; but, on the whole, they have been nearly entirely removed by denudation from the west site of the illud. In the eastern and south e stun portion, however, they form in conjunction with the

During this long period of sedim ntation various seams of cal ware formed, the oldest being those of the Mersey roal field, which correspond with those of the cal measures of New South Wales. Above these some marine beds, and than another and much thicker and more extensive coal-best ing formation which is referred to the Merseyin period and is consequent. for nation, which is referred to the Mesogoic period, and is conquently younger than the main Newcastle coal series. Thou there is a complete break in the character of the vegetation found with our lower and upper cold bids, there does not seem to be any important stratigraphical break, the deposition of se liments begun in Porm -Carbonif-rous times having apparently gone on without great interruption into the Mesozcic period. This long pariod of quiet was succeeded by one of tremendous voluntic antivity, foods of lava being nounced out ever the whole island. The high central plateau and great mountains such as island. The high central plateau and great mountains such as Ben Lomend and Mount Wellington, which are composed

ryeal before the Australian I.M.E., Hobart meeting

T gaser was before the Australian I. M. E., it short meeting.
I Lately f have seen a place pear the Trial Harbour to Each more required to green line.
I Let possible that a formation found rather extensively at the Dial Range and south of Table Cape, referred previously to the Discoular system at present, may yet prove to belong to the base of the Coal Measures series.

tone resting on strata of about this time elevated greenstone the coal measures, were about this time elevated by series of huge faults, probably as a consequence of the volcanic forces at work, and the older strata were disrupted, faulted, and injected with igneous dykes and sheets. Since the conclusion of these great outbursts of greenstone in M-s>z io coal times, Tasmania appears never to have been entirely submrrged beneath the sea, the only marine strata found of later age lying at low levels along the coast of Bass' Strait. Immensa subserial denudations must have gone on during this prolonged at low levels along the coast of Bass' Strait*. Immensa subaerial denudations must have gone on during this prolonged exposure, and, no doubt, enormous quantities of the volcanic covering sheet were eroded away, exposing the buried older rocks again. Early in the Miocene period the general level of the country must have been higher above the sea than nox, for we find ancient river channels, or "deep leads," now as much as 270 feet below the tide lines; but a long continued per ol of slow subsidence set in which caused the river beds to becompaner and more deeply filed with gravels, and allowed the sea to encroach upon the land, forming great accumulations of diff along our northern and western shores. The subsidence went on until in the north the general level of the land must have been some 700 feet lower than at present. Another volcanic period then began, and large areas of country, especially in the northern began, and large areas of country, especially in the northern districts, were covered with flows of basalt, many of the old districts, were covered with flows of basalt, many of the old river valleys being thus more or less obliterated. After this eruptive period the northern part of Tasmania has been slowly rising, and the modern rivers have cut their way down into the accumulated gravels and drifts of the older Tertiary period, and in a great many cases have not exactly followed the old river channels, but have cut fresh ones to on side or other of these. This movement of subsidence and electric explaints agree the second subsidence and side or other of these. This movement of subsidence and elevation explains a great many facts as to the occurrence of deep leads and high gravel terraces throughout Northern and Western Tasmania. The movement of elevation has not, however, brought the land back to the same level as before the great subsidence, and the "deep leads" in consequence are often below sea level at their outlets. In speaking of the general level of the land, I am, of course, taking no account of the lowering effects of sub-aerial denudation, but only referring to those of earth movements of elevation and subsidence. earth movements of elevation and subsidence.

With the foregoing history in mind we may now make a list of the useful minerals of Tasmania according to the geological formations in which they are found, which will also give their geographical distribution. He Me

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Archæan System.

The portion of the country in which the archean rocks are best developed has not been much explored, being wild and difficult of access. Some gold is said to have been found in it, and a few voins carrying a little galena, copper pyrites, blende, and arsenical pyrites, containing some silver, have also been discovered, but as yet it is of no importance as a source of useful minerals. Probably further exploration, however, will result in discoveries of valuable ores,

Cambro-Silurian System.

Cambro-Silurian System.

In this are several valuable minerals, gold being the most important. Our principal gold fields are all of this age, with the exception of the Tertiary alluvial deposits, and some of the West Coast fields are Upper Silurian. They are better known in the north-eastern district than elsewhere, the country having been longer settled, and being more accessible than the West Coast. From Beaconsfield the Lower Silurian auriferous rocks are found going eastward throughout the Lefroy, Back Creek, Denison and Golconda, Waterhouse, Mount Horror, and Gladstone gold fields, and south from Mount Horror through the Mount Victoria, Mathina, Scamander, Ben Lomond, and Mangana fields. On the West Coast gold has been found from Macquarie Harbour northwards to Table Cape, the most important fields being those of the King River basin, Mackintesh basin, Arthur River, and Cam River districts. In some of these the gold may be derived from Upper Silurian strata, but it is most likely that the source of the greater part is in the Lower Silurian rocks. Very few reefs have, however, been discovered, the gold having been won from Tertiary and recent alluvial deposits derived from the disintegration of the older rocks. It is must probable that the belt of auriferous and argentiferous cupreous pyrites extending from Mount Lyell through Lake Dora, Mount Roid, Mount Murchison, and the Rocky and Savage Rivers, is enclosed in this Lower Silurian formation.

The copper pyrites veins of Saxon's Creek near Frankford: in this Lower Silurian formation.

in this Lower Silurian formation.

The copper pyrites voins of Saxon's Creek near Frankford; the iron doposits of Penguin Creek and Blythe River; the bismuth cres at North Mount Reid, and some tin cros at Ben Lomond, Upper Soamander, St. Paul's River, Whale's Head, and Mount Lyons, are found in country of most probably Lower Silurian age; but probably in many cases, that of the tin cre especially, the veins were not formed until much later times, after the grantic intrusions. It must always be remembered, too, that he e is very little evidence yet collected to assure us of the age of many of our older formations, and the reference of them to Upper or Lower Silurian is still doubtful, and only to be taken as tentative.

taken as tentative. Excellent limestone is carried from this formation at the Gordon River, Beaconsfield, and the Mersey district, and could be worked at numerous other localities. Some of this polishes well, and it is a very fine black marble, which sooner or later will be come a convenient and the sound of t will become a commercial product. Roofing slate is found in the East Tamar and Back Creek districts, of pretty good quality, and was worked in the Australasian and Bangor quarries, but is neither case was the work profitable.

Upper Silurian System.

Upper Silurian System.

Ricks of this age are found in the Queen River gold field, Middlesex gold field, and Zeehan and Dundas silver fields; but it is impossible at present to trace the boundaries of the fermation, and to say where it ends and the underlying Lower Silurian begins, consequently there is much doubt as to what mineral occurrences should be included in each. The Queen River, Lynchford, Princess River, and Howard Plains roef are pretty certainly in Upper Silurian country, and so also are those of Middlesex and Bell Mount; but, while considerable portions of the Zeehan and Heszelwood fields belong to the same formation, it is pretty clear that the older Lower Silurian rocks also come in, and especially along the Dundas range and towards Warnath. In addition to gold and silver-lead it contains zinc, copper, antimony, cadmium, and bismuth in greater or less amount. Useful limestones occur among the rocks of this system, but seems generally to carry more magnesis than the pure Lower Silurian cness. Iron and manganese occur in quantities useful for flux ones. Iron and manganese occur in quantities useful for flux for smelt re, in the gossans of the silver-lead lodes. Tin ore and bismuth found in the Upper Silurian strata seem always to be closely connected with intrusions of granite not far distant.

Granite Formation. Nearly everywhere that granite is found in the colony it has the orea associated with it in lodes and stockworks. The largest are not granite is in the north-eastern district in the basins of the Regardoma and George's Rivers, and almost every watercourse country has been worked for alluvial tin. Another large sreating Scotts dale and Mount Stronach has not been right in tin, the unit seems of found. On Cape Barron and Flieders Islands it crops out again, and is stanniferous; the same is the case with amalier areas at Bea Lomond, St. Paul's River and Fraydine 6.

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Peninsula. It may be remarked that a glance at the geologica map of Tasmania shows numerous outcrops of granite along a line running south from Flinders Island along the East Coast: this is probably the axis of a range of mountains which has been denuted to the roots. Along the West Coast there is a somewhat similar line of granite from Hunter's Island downwards through the area of old rocks forming the west side of Tasmania, but this is much more interrupted than the East Coast line. The principal granite areas are the Hunter's Islands, the vicinity of Mount Housetop, the Meredith range, and Mount Heemskirk. Mount Bischoff, which has yielded nearly half the tin produced in the country, is not on one of the large granite areas, but is probably connected with the adjacent Meredith and Magnet range granite, and possibly with the Mount Housetop mass. The granite at Mount Bischoff, instead of being the usual felspar porphyry with much biotite, is a white quartz porphyry, and in places changes to topaz porphyry. A dyke has burst through Silurian country and formed the great tin deposit. A similar dyke at North Dundas is accompanied by very similar tin ore, often very rich. The south end of the Meredith range and Mount Heemskirk promise to become important tin fields.

At the Lis's and Golconda gold fields we find auriferous veins running through the granite, but elsewhere it has not proved gold-bearing. It is possible, however, that some connection may in the future be traced between the granite intrusions and the auriferous reefs of the north-eastern fields.

At Ben Lomond, Scamander, and Mount Heemskirk, a gentiferous galena has been found in veins in the granite, and are oniced with it. Bismuth also has been found, and wolfrant is pretty common. Tourmaline, rock crystal, beryl, zircon, sapphire, top-z, and several other gam stones are commonly found in the alluvial debris of the granite districts, and some deposits of kaolin are also known. Some of the granite itse'f is very suitable for building and monumental p

Serpentine Formation.

Serpentine Formation.

With the exception of a small patch near Beaconsfield, thisi centined to the silver fields of the West Coast, being found a Heaklewood, along the Huskisson and Wilson Rivers, at Mount Dundas, and at Comstock and Trial Harbour. It seems thus to be somewhat closely connected with the Meredith range and Mount Heemskirk granites. At Dundas and Heaz'e-wood it carries lodes of argentiferous galena, some of which traverse both it and the Silurian country, and it seems likely that the re-pentine may be the source of all the silver-lead deposits. It also carries chromic iron, nickel ores, and magnetice, and is probably the source of the platinum and iridium found in the alluvial deposits of the Pieman River basin. Several large deposits of magnetic iron ore occur near Mount Heemskirk in and near the respentine, and at Anderson's Creek, near Beaconsfield, a deposit in it was some years ago worked for iron. Quite recently a diamond is reported to have been found in some gold sluicing operations at Mount Donaldson. If this is confirmed, it is probably to the serpentine that we should leek for its average this heige approximation and vicinities. confirmed, it is probably to the serpentine that we should look for its source, this being somewhat similar to the picrite of South Africs. Some of the serpentine is of pretty colour an cuts well, and would be useful for ornamental purposes. I often contains chrysotile and asbestos, sometimes in quantities which encourage the hope of successful working.

Permo-Carboniferous and Mesozoie System The beds of the coal measures have been recently classifie as follows by Mr. R. M. Johnston, F.L.S., who has made special study of them:—

Permo-Carboniferous. Characteristic Form. Lower marine beds. Tasmanite beds. Tasmanites Punctatus. measures, Mersey, Glossopteris, Gangamoptori-mety, Tippagory, &c. Noeggerathiopsis. Henty, Tippagory, &c.

4. Upper marine beds.

5. Adventure Bay con coal Gangamopteris Spathulata a Vertebrara Australis.

6. Mount Cygnet coal 7. Soutaport beds.

Vertebrara Australia Pecopteris lunensis. Mesozoic.

8. Lower Sandstone (Lower Ganoid Fishes—Votebraria.

Mesozoic). 9. Ida Bay coal measures, 10. Upper coal measures:

Jorusalem, Fingal,
Spring Hill, York
Plains, Hamilton, Richmond, New Town,
Sandfly, Recherche, Sandfly, Recherche, South Cape, Longford,

Pecopteris lunensis and Ze-gephyllites elongatus. Pecopteris, Alethopteris Thinnfoldia, Sagenopteri Neuropteris, Zeugophyllite Baiera, &c. Alethopteris Sagenopteris

The marine beds are found at very varying altitudes, scattere over the eastern and central portion of the colony, but on rarely occur on the West Coast. The principal industrial products are limestone and hydraulic limestone. The shell mar' and bubratone of Mar's Island may in time find their way int the market, and so also with the lithographic s'one of Ne River and the Jubilee Mountain, which probably belongs to this series. Some of the sandstones are used for building purpose The coal measures yield coal and fire clay, and the lower measures colours.

(To be Continued) (To be Continued.)

"EL CALLAO" GOLD MINING COMPANY, LIMITED,

The greater portion of the partnership capital of the company was represented by the rich lode El Callac. This having been exhausted, the partnership funds can now be diminished by noce than one moiety, and the Board of Directors makes known more than one moiety, and the Board of Directors makes known to you that it does not possess the necessary funds to carry out indispensable works upon other known lodes, which, although they would not replace the fabulous riches of £1 Callao, would permit the working of the Mines to be carried on, which is the object of the company, with considerable probabilities of their paying expenses and leaving profits apart from the possibility of the new rich discoveries being made, which is varylikely in the extensive mining region to which we have access. The Company, El Callao, commenced its operations in the year 1870. The object of sits constitution was the working of the Mine upon the lode El Callao, by the system of cuttings or ditches with a small 5 Stamp Mill. At that time the Law did not allow Mining concessions to be demarcated in the Dis-

trict of El Callao, and the lode known by this name was divided into hundredths of cutting claims which belonged to a similar number of persons. The Capitalof the Company in cash and claim shares was B. 322,000, divided into 32 1-5th shares of B. 10,000 each. In January, 1878, an Ordinary General Meeting was held, composed of 12 Members representing the total amount of the Shares. The majority of the Shareholders, if not all, were convinced that the rich lode El Callao was an inexhaustible Mine, and in the event of the contrary proving the case, they were disposed not to enter upon any other mining undertaking, considering all their helding in the company as lost if they were unable to sell it at any price. In this belief they resolved to add to and render more clear the Act of Constitution, and to approve new Statutes, placing all the obstacles possible for the purpose of impeding any other undertaking except the working of the l de.

The Company worked a very rich lode, and invested the greater portion of the gold it produced in real and personal property. It acquired extensive mining properties, erected a 60 Stamp Mill, built extensive establishments and all the 60 Stamp Mill, built extensive establishments and all the workshops necessary for the purpose of assuring the stability of the works, notwithstanding the distance of the Factories which furnish the material and implements, and developed the working in a remarkable manner. When it had invested more than 38,000,000 of Bolivares, the General Meeting in fulfilment of Case 2 of Regulation 2 of the Act of Constitution, increased the capital to 32,200,000 Bolivares divided into 257,600 Shares of 125 Bolivares, which were allotted among the shareholders in exchange for the previous securities. The meeting which in 1878 effected the alterations in the Instrument of Constitution, and sanctioned the new Statutes, was, as already stated, composed of twelve persons representing the total amount of the then existing shares—32 1-5th. The fact was not taken into account that after the number of shares had been increased to so high a figure as 257,600, which would be distributed among many persons, it would be impos-

shares had been increased to so high a figure as 257,600, which would be distributed among many persons, it would be impossible to form a General Meeting with the quoram required by the Act of Constitution and the Statutes, in order to adopt any measures in the sense of obtaining capital even for the purpose of saving the Company.

We have stated that the shareholders possessed a blind faith in the inexhaustible Mine El Callao, and that they were resolved to lose everything if the contrary should prove to be the case, wherefore, since the number of shares was increased to 275,600, both the General Meeting and the Board of Directors have only been able to occupy themselves with more acts of administration and direction of the works. In 1887 the lode El Callao gave signs of exhaustion; it was at first belived there was some interruption, and very costly works of exploraton were undertaken in all direcand very costly works of exploration were undertaken in all directions. The vertical shaft Number 6 was sunk to 335 metres, and by tions. The vertical shart Number 6 was sunk to 335 metres, and by the plan of the works it can be seen that nearly 1000 metres of exploration galleries have been opened in all parts in very hard rock. The lode has not disappeared at all in any of the galleries, but in all it has become reduced to two and one inches, and although it always carries gold it is impossible for it to pay the expense of extraction intermixed as it is with rock of a very obdurate nature. In these workings we have exhausted the ultimate production of the Mine and also the funds we had in reserve. All hope of striking the continuation of the rich lode having been at last lost, and under the absolute necessity of closing the

All hope of striking the continuation of the rich lade having been at last lost, and under the absolute necessity of closing the Mine, there still remained a reserve well worth consideration—that is to say, the pillars which sustained the roof of the Mine worked. So long ago as 1836, the President of the Company conceived the idea of uniting the greater part of the Companies into one, with its centre at El Callao, in order to erect there a great Central Mill from whence the ore might be carried from the different Mines by means of Railways. The project was not carried into execution because the shareholders of El Callao believed that they were about to be sacrificed for the benefit of the owners of the ecution because the shareholders of El Callao believed that they were about to be sacrificed for the benefit of the owners of the other mines, which were very poor, compared with El Callao. When this Mine was about to be closed the idea was again considered. Then it was very easy to carry it into effect, for all the other companies had stopped their works and embraced the idea with enthusiasm, but we found the El Callao Company could do nothing by reason of the obstacles raised by the Act of Constitution and the Statutes.

In this state the Board of Directors resolved to try the plan, contracting the working of the other mines for joint account.

In this state the Board of Directors resolved to try the plan, contracting the working of the other mines for joint account, and constructing the railways to carry the ore to the mill, and it determined to invest in these works the reserve which it had in the pillars of the El Callao Mine, which was about to be closed. It contracted for the working of the mines of the Colombia Company, and afterwards for those of the Nueva Panama Company, for which it constructed 10 kilometros of Decauville Railways, uniting the mines of both companies with the mill of El Callao. A branch of this railway connects the mill with the Remington lode, the property of El Callao, so that with the last resources taken from the pillars of the Mine El Callao, we have constructed 10 kilometros of Railway and put in course of working the Remington, Colombia, and Nueva Panama Mines. As a trial of the plan, the results have been encouraging, and show that it may be continued with good results; but having invested therein our last resources, it would have been necesinvested therein our last resources, it would have been necessary to have found from the beginning in all or some of the mines ore which would pay all the expenses at least; but this is not a very easy matter, and only happens with lodes as rich as El Callao in its bonanza.

Expended

HE following is from the report of the board of directors to the extraordinary general meeting, held the 14th day of December last:—

that this is the liquidation of what was known as the rich Mine El Callao; but, at the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the satisfaction of proving that the result for the Shareholders has not only been the same time, it has the same

The remittance of September did not produce sufficient to cover the expenses of that month, and the Board of Directors sanctioned on the 28th the following Resolution, which was communicated to the Vice-President:—"The Board of Directors having decided by Resolution of this date that Mr. Barry Searle be relieved from his office of superintendent as he has requested, RESOLVES—"1st. That Señor Antonio Domingo Cagninaced, the Vice-President of the company, now at the mines, shall proceed to organise the continuance of the works until he shall succeed in paying for the same out of the profit of the said mines, for the Board of Directors has no money at its disposal wherewith to continue the works. 2nd. That he shall not draw against the Treasury unless he remits sufficient gold to pay the same. 3rd. That in the event of his not being able to prosecute the works, paying all the expenses out of the profits of the Mines, all works shall cease and all precautions shall be taken to ensure the care of the machinery, workshops, implements, railways, &c."

When an undertaking finds itself in a situation like ours, pathing remains but one of three courses. Let Aloan charging

Mines, all works shall cease and all precautions shall be taken to ensure the care of the machinery, workshops, implements, railways, &c.'"

When an undertaking finds itself in a situation like ours, nothing remains but one of three courses. 1st. A loan, charging all the properties. It is prohibited to charge all. 2nd. An issue of Preference Shares, with interest, which is also prohibited; and 3rd. Liquidation. This is also prohibited, for in order to resolve any of the three points, according to the Instrument of Constitution and the Statutes, there is required for some the votes of the whole of the shares and for others those of five-sixths, and it is shown that it is impossible to call a meeting with a like representation.

The General Meeting of Shareholders of the National Mining Company, El Callao, in its Extraordinary Session of the 14th December, 1895, sanctioned the following Resolution:—

That in the judgment of the Board of Directors, the Partnership Capital of the Company may have decreased by more than one-half, in consequence of the exhaustion of El Callao lode.

That under these circumstances, in accordance with Article 204 of the Commercial Code, it is necessary either to increase the capital, or to place the Company in liquidation.

That the present General Meeting cannot adopt either of these measures with the quorum of which it is at present composed, without infringing the absolute regulations of the Instrument of Constitution and the Statutes of the Company.

That paragraph 2 of Article 13 of the Statutes, which refers to the convening of meetings with any number of shares, which may assemble at the Third Convocation, prohibits inter alia, "The alienation of any of the real property of the Company: The contracting of any obligations offering any other guarantee than the profits of the undertaking," and

That the Company possesses 3500 shares in the Colombia Company and 5000 in the Nueva Panamá Company of 500 Bolivares each, nominal value, which are not real property, it hereby Resouves: "Th

resours: "That the Board of Directors is sufficiently authorised to contract loans for the purpose of continuing the workings up to such sum as it may deem expedient, affecting for the payment thereof the free profits of the undertaking, and charging by way of special guarantee the 8500 Shares it possesses in the Companies Colombia and Nueva Panamá."

REPORTS FROM THE MINES.

BRITISH MINES.

BRITISH MINES.

TINOROFT.—South Tincroft. We are making very good progress in sinking Martin's east shaft below the 342 fathom level. In the 306 fathom level driving west of crossout we have had a decided improvement during the put smoath, the end yielding splendid stones of tin. At present it is in the crosscourse. In the winze sinking below the 230 fathom level east of Harver's sogine shaft the lode is large, and worth for tin £10 per fathom. We have communicated the winnes minking below the 270 fathom level during the past month, which have laid open a large section of stoping ground. On the 270 fathom level during the past month, which have laid open a large section of stoping ground. On the 270 fathom level during the driving west of Martin's east shaft the lode is worth for tin £5 per fathom. In the winne sinking below the 234 fathom level during the diriving west of Martin's east shaft to nithe north part of the lode is worth for tin £5 per fathom. In the winne sinking below the 234 fathom level and the lode is worth for tin £5 per fathom. In the 426 fathom level wast of crossout, west of downright shaft, within 5 fathom seed this point is 11 fathoms wide; on the surreme south part the end is worth for 6 feet wide £15 per fathom; the extreme north part is worth for tin £39 per fathom.—Morth Tincroft. In the 174 fathom level diving west of 80, 1 Martin's per fathom, and worth for tin and arsening £12 per fathom. In diving the 185 crossout north of Willoughby's shaft we have more such farth and worth for tin and arsening £12 per fathom. In the winze sinking under the 10 fathom level east of Willoughby's shaft we have a very promising lole it has greatly timpreved for copper, being now worth for copper, tin, and arsening £12 per fathom. We are pleased to sty during the heavy rains our pumping englae on this part have worked exceedingly well, and the waier is in for at the per shaftom. We are pleased to sty during the heavy rains our pumping englae on this part have worked exceedingly well, and the waier is

COLONIAL, INDIAN, AND FOREIGN MINES.

wing to various causes in connection with the pitwork, but hope now to get in the pitwork of the pitwork, but hope now to get in the pitwork of the pitwork, but hope now to get in the pitwork of the pitwork, but hope now to get in the pitwork of the pitwork of

1-st and SMI case as street—works a taken, "As bounded from 2 on a tap per cent." If per event size, and 5 27 to 15 concess slive per to the Mines IA Shakas." For Note 1 cent in the Mines IA Shakas. "A string gove on fairly well. In the No. Takes took this he hanging wall is in gove took. The No. 6 contil he hanging wall is in gove took. "No footwal can be seen, being every broken with grantle intervention," and the string of the No. 6 contil he way broken with hard grantle between the broadbar. Note: It is much in the same kind of forwation. No. 2 and 4 invested are much hard grantle between the broadbar. Note: It is much in the same kind of forwation. No. 2 and 4 invested are much the same as last reported. It is a pichela. No. 2 and 4 invested are much called the same as last reported. It is a pichela. No. 2 and 4 invested are much large or govern. The Statistics of the same and the sam

ompleted a track to reach Nicoll's working about 1/2 mile distant, and purpose urveying shortly to drive a crosseut lower down to come under a winze such

surveying shortly to drive a crossest lower down to come under a wines such on Nicolf's reef. The South Tokates workings have been cleared of water, and we purpose laying tramroad here for the purpose of resinking the wines above our deep level as soon as the water is drained.

DON PEDRO.—Mine manager's monthly report, December 31: During the past month a great deal of work has been accomplished in opening out the south part of the mine, which is now laid open extensively for stoping operations from the 60 to the 40 horizon, I will herewith give the amount of resores standing above the 10 fathom crossout which, averaging the quality from the past month, should yield fully 1/2 an ounce to the ton. From the breat of Nos. 1, 2 and 3 stopes on No. 3 shoot to the bottom of the 60 horizon is 6 fathoms 3 feet on dip of lode, or 2 fathoms 3 feet on dip of lode, or 1 fathoms 3 feet on dip of lode, or 1 fathoms 1 foot, or 7 fathom wertical. From the breat of Nos. 1, 2 and 3 stopes to the bottom of the 170 fathom horizon is 17 fathoms 4 feet on dip of lode, or 1 if fathoms 1 foot vertical. The vertical lode from the 40 horizon to the bottom of the 57 horizon on dip of lode is 27 fathoms 3 feet, or 11 fathoms 1 foot vertical. The vertical lode from the 40 horizon to the bottom of the 57 horizon on dip of lode is 27 fathoms 3 feet, or 11 fathoms 1 foot vertical. The extent or width from north to south of Nos. 1, 2 and 3 stopes is 5 fathoms 2 feet. The thickness of the lode in Nos. 1 and 2 stopes averages about 5 feet, whereas the No. 3 stope embrices part of the vertical lode. The winteral lode averages in width from foot to headwall about 6 feet. The mineral obtained throughout the month was taken from No. 3 hoots, this general work bing of good quality, but at forebreast altitle water is issuing from the formation, but at present not of much consequence. From this stope a rise has been stated on the course of the lode and risen 1 fathom 5 feet. The line of gold quality, but at forebreast altitle water is issuing from the

See that the second of the property of the control of the property of the property of the control of the property of the pr

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same appearance as that in the end advancing from No. 1 shuft, 470 and north-cast from No. 2 shaft was driven 349 metres, but at present is in subled without one. 24 send north-cast from No. 2 shaft was driven 349 metres, that at present is in subled without one. 24 send north-cast was driven 350 metres. The end continues in quartie 10ds, carrying very little private and is of low great. A stope that has a kely been 270 metres in quarties, carrying interfacialfied lines of quarts. 400 end north-cast was driven 650 metres. It carries a branch of orei instead thick against the continue of the continue

promising appearance and I am hopeful that it will continue to improve,—Health, I am pleased to say that the health of the camp is good.

BREMNAES,—The following report has been received from the mine, dated Haugesund, January 20:—Rivig mine, 30: north level. In this level, although the width of quart is somewhat less than previously reported, the quality of same has greatly improved. The quarts to-day has an average width of about a foot, same carrying a large quantity of galena and copper pyrites. A blook of quarts brought from this working on Saturday and broken at surface showed in each separate fragment specks of gold. Two men stoping in back of 300 north have a quarts lode nearly 3 feet in width, of value 3 dwas, gold per ton. The quarts in 20: south level has increased in width, and is carrying a greater quality of mineral; altogether the level presents a greatly improved appearance. The 100 south level is still running in good ground, with quarts about 2 feet wide. A stope working in bottom of this level is breaking good mill quarts.—Capleskog mine. The level driving north from bottom of shaft is being worked by four men. The quarts in lead has varied from 8 inches to nearly 2 feet in width. Where narrowest the quarts is highly mineralised, in fact in some places the quarts has been entirely reolaced by galena. Somes with visible gold are being broken from this work into the captain and the property of the stope working in back of above level has same chracteristics as level, the quarts varying from 3 inches to feet, and being highly mineralised in its narrowest parts. The stopes working in back of above level are same chracteristics as level, the quarts varying from 3 inches to feet, and being highly mineralised in its narrowest parts. The stopes working in back of upper north level are without material change as to width of quarts and value of same.—Fladenne, Two men have commenced to sink in bottom of cutting, and have opened on a good, strong, well mineralised quarts lode. Stones showing fine gold h

Montana Company. Tributes are looking better than last reported.

SALISBURY-MURCHISON.—The following report for the fortnight ended December 14 has been received from Mr. Edwin Wattis, the company's general manger:—Salisbury. The engine shaft has been sunk 12 feet and timbered up, making full depth 30 feet. Three men working one shift, are working here. Two men have been clearing the ground, erecting store room and office which are nearly completed.—Tasmania. Two men have been driving on the course of the lode of the footwall side, and are in 43 feet east from the vertical shaft. No improvement in this direction.—Agamemuon. Two man have sunk 20 feet in the engine shaft during the fortnight, making full depth 40 feet, ground passed through decomposed granite. Two men have deepened the prospecting shaft 18 feet, full depth 36 feet. Reef about 1 foot thick, showing a little gold in the stone, not good enough to send to the mill. One man cutting timber and doing smith's work.

TRUE BLUE (Hannan's).—Mine manager's report for the fortnight ending

timber and doing smith's work.

TRUE BLUE (Bannan's).—Mine manager's report for the fortnight ending December 23: Surface, The stables, yards, and powder magasine are now finished and surface buildings nearly completed.—No. 1 main shaft. The contractors have sunk a further distance of 22 feet, making a total distance of 86 feet from the sill. The ground has been good for working from the commencement.—Underlie shaft. The contractors have sunk this shaft a further depth of 12 feet, making a total distance sunk on the underlie of 100 feet, or 112 feet from the brace. At a depth of 55 feet on the underlie of 100 feet, or 112 feet from the drive has been extended 5 feet from the shaft. I shall this fortnight let a contract for 100 feet of driving to a point opposite the crossout to be driven from the new main shaft.—Jublies section. The contractors have sunk the Jublies shafts a further depth of 10 feet, making a total depth from brace of 99 feet. The ground is very hard and difficuit to work, but well mineralized, and the most tayourable class of country we have set had in this section of the property.—) 50 feet level. The contractors have driven 21 feet for the fortnight, The country is still broken.

BUSHMAN'S GOLD MINES OF WESTERN AUSTRALIA.—Mr. John Howest, who promised to make an examination and report on the company's property, writes under date December 2 last; I do feel myself able to go up at presents but he hopes to be able to do so in March; he states, however, he sent for Mr. March the manager to see him. Mr. March has sent a report from which the following extracts are taken, as indicating the direction in which it is the intention of the board to direct attention for the future development of the property. Mr. March says: On block 729, Birthday reef. I should also advise that the 12 feet shaft at (b) abould follow the reef down as deep as conveniently possible. This would give us information as to the dip of the gold-mering stone, and also probably the character of the earth movements. The shaft might afterwards be useful as an air or mullock shaft. At (c) across east and west reef, about 18 inches thick has been opened by a hole about 4 feet; deep. The stone broken from this reef is worth 1 ounce to 2 onices per ton. This reef runs into and forms a junction with a north and south body of stone about 3 feet thick of low grade quality at the surface. The stone in the small cross reef is sufficiently promising to warrant the sinking of a shaft to follow down the junction of the two reefs where some good gold bearing stone should be met with. At (f) there is a small reef ranging from a few inches to 2 feet wide of very consistent gold bearing character. I think any portion of this reef will pay where there is sufficiently promised to the continuation of the season boundary of the claim. It is traceable at the surface for a length of about 1000 feet, though in many places very small. The largest bodies of stone occur near the two ends, where in each place a prospecting shaft has been pat down to about 14 feet, producing stone of a spayable character. I should advise the continuation of these shafts following the lode down to, if not below, water level (here about 3) feet. On Block 132. This block wa

MYSORE GOLD.—R. Hancock, January 8. Mining operations for the fortunal is anding January 8: Rower's that. 140 feet loved under the control of the standing January 8: Rower's that. 140 feet loved under the control of the standing January 12 Rower's that. 140 feet loved under the standing of the standin

MINING AND METALLURGY OF QUICK-SILVER IN MEXICO.

By JAMES MACTEAR.

Part IV.

(Continued from page 107.)

SAMPLES carefully taken from the workings of the San Antonio de Padua Mine were examined:

Antonio de Palua Mine were examined:—

"No. 1 Series.—Taken from the sides of the big ore chamber first met with on entering the San Antonio Mine (space excavated, roughly about 7000 cubic feet) showing general character of the ore still remaining, called by the miners 'fierroso.' This class of ore is highly farruging as Sandar were found to contain:

1.46 per cent. quick-ilver. 1.16 2.24

" No. 2 Series .- Taken from the second large chamber of the 'no. 2 Series.—Laken from the second large enamoer of the old mine, where traces of ore in the roof and sides indicate its probable continuance. The ore is of rich quality, chiefly 'negro' (soft black ore), containing also, however, 'fierroso' and a good deal of native mercury. The quality has evidently and a good deal of native mercury. The been rich, representative samples showing 7.89 per cent. quicksilver.

7.42 "No. 3 Series.—Taken from ore in new gallery, averages across the vein at three points, the section being 20 inches wide and lying almost horizontal. The samples showed:—

3.48 per cent. quicksilver. 4.20 99 3.60

Average samples taken from vertical body of " No. 4 Series .ore 31 feet thick showed :-

4.60 per cent. quicksilver.

"No. 5 Series.—At end of new working. Samples taken across the face showed :-

the face showed:—

5.80 per cent. quicksilver.

"No. 6 Series.—Average of hard and soft ore mixed from recent discoveries in 'Augustias' cutting:—

1.60 per cent. quicksilver.

"No. 7 Series.—Two samples of black ore now being extracted from the price.

from the mine :-

11:30 per cent. quicksilver.
"Various other samples were taken and tested, giving as under :--" No. 8 Series.-

-Samples from Tunel del Desierto:-1.80 per cent. quickeilver.

"No. 9 Series.—Samples from breast of drive of Guadalupe Mine towards San Antonio de Padua: 3:30 per cent quicksilver. 4.30

3.30 -Samples from lower end of Guadalupe " No. 10 Series .working :-

4.10 per cent. quicksilver. "No. 11 Series.—Samples taken from small veins in old work-

ings of La Solidad :-0.90 per cent. quicksilver.

Samples from Jesus Mine; tribute workings " No. 12 Series. on the Trividad Hill:—
'Acerado' or 'steel' ore... 2.20 per cent. quicksilver.

'Granate' or 'garnet' ore 1.00 0.90 99 0.94 " No. 13 Series. — Samples from the San José Mino, soft 'vermellon' ore in 'panino':-

99.

1.60 per cent. quicksilver. 0.93 Samples of soft ore from bottom of old work-" No 14 Series .-

"No. 15 Series.—Simples from old San Antonio Guyabo :-

1.40 per cent. quicksilver. 0.90

" No. 16 Series .- Simples from old dump-heap, Sangre de Cristo Mine (old workings inaccessible):—
0:30 per cent. quicksilver.
0:25

"The estimate made at the time of the probable amount of ore obtainable from the mines was 24 tons average ore per day, the quality of which would probably be equal to 3 per cent quicksilver, but to keep up this output or increase it vigorous development work would be required, so as to have always ore reserves in hand. Under these conditions the output of quick-ilver, it may be anticipated, will reach over 5000 flasks per annum, the cost of production of which should be not more than £3 5s. per flask.† £3 5s. per flask.†

"A good supply is absolutely essential to the satisfactory condensation of the quicksilver, and this is not at present available, but it is believed it can be found by sinking a well in the plain of San Juan Dilla."

plain of San Juan Dills."

The substantial accuracy of the author's views, as above expressed, has been thoroughly proved by the results of the working during the last five years. The operations were begun at the end of 1890, under the able direction of Mr. Robert Mackenzie, whose sad death prematurely closed a career of much promise. His loss was a most serious one for the company, as it was quite impossible to replace the experience and knowledge of the country which Mr. Mackenzie had acquired. He was a man of great energy, with not only a thorough knowledge of mining work, but of general business and accounts, and in him the Institution of Mining and Metallurgy lost a valuable member.

Unfortunately, in starting their operations, the company hampered by having an amount of subscribed capital which (after completing the purchase of the property) was totally inadequate for the proper development of the mines. In consequence, all the development work has practically had to be carried out by the expenditure of the profits made from the production of quicksilver. Still more unfortunately, the price of quicksilver, which in 1890 was £11 5s. per flask at the mine, sank steadily until it reached only about £5 10s. per flask. The price now, however, is over £7.

"A paper read at the recent meeting of the Institution of Mining and Metallurgy. † The prices actually being obtained at that date were equal to £11 is, per dealt, at the miss. After a considerable amount of preliminary work in clearing out old workings and obtaining a general idea of the character of the ore deposits, Mr. Mackenzie adopted a matter of exploration which comprised, besides the driving of several galleries in known ore-bearing ground, the driving of a main level, to be called the "zero level," communicating with the upper workings by a winze, so as to establish a complete system of ventilation, and to facilitate the extraction of the ore and refuse by means of a tramway to be extended to the furnaces and ore yard.

In June, 1892, Mr. Mackenzie wrote the author as follows:

and to facilitate the extraction of the ore and refuse by means of a tramway to be extended to the furnaces and ore yard.

In June, 1892, Mr. Mackenzie wrote the author as follows:—
"You will remember that the black ore appeared in apparent veins of colours ranging from coffee to black-blue, according as it was more or less adulterated by the fine mud, called 'panino,' from time to time opening out into pockets; the 'accrado,' accompanied with a crystallised cinnabar, known as 'granate,' occurs immediately below the black ore, with two differences—first, the black ore is found in a mass of mud and small stones, known as 'almendrilla,' and with the 'accrado' the small stones disappear and are replaced by huge blocks of broken rock with the 'accrado' filling the cracks; in fact, now at last appearing in the more familiar form that the Germans call 'stock-work,' as if the crushing action of the geyser forces had not proceeded so far as the lower level. These blocks appear to be limestones strongly charged with gypsum in filtration; second, whereas the black ore is very finely disseminated throughout the 'panino' mud, with the 'accrade,' we, for the first time, find a 'gangue' properly so called with the ore, scattered through it in pieces of considerable size of high contents. The mechanical condition of the black ore indicates clearly secondary deposition, hence its capricious and unreliable character. The 'accrado' has also up till now, appeared secondary, as its 'gangue' has been very mixed up, quartz, fluorspac, baryta, calcite, altogether, with none apparently predominating, the whole being very soft.

"You may remember the large mass of 'accrado' ore you whole being very soft.

calcite, altogether, with none apparently predominating, the whole being very soft.

"You may remember the large mass of 'acerado' ora you saw in the sides of a winze. In the course of our wanderings we struck this mass on the other side, and quite recently communicated through the mass with the winze. What do you suppose I saw in the lower part of this communication? Solid hard quartz in large body, rich in 'acerado' and 'granate.' It at once occurred to me that here for the first time we had the ore 'in place.' So far as my enquiries go, nothing like it has ever been seen in the mine before. I ordered the foreman at once to sink, sticking to the hard quartz; this was a few days ago. They have not yet had more than two days' sinking, but have sent me some magnificent specimens, better than anything we have yet seen.

"I am anxiously waiting to see the outcome.

"Hitherto the ore has refused to go down, and this has been worrying me in the complete absence of any development work."

In December of 1892, he wrote:-

work."

In December of 1892, he wrote:—

I have to confirm my telegram of yesterday:—

'Rich strike lowest point mine following geyser chamber.

For the present promises (to be) extensive.'

"I have already informed you that there was considerable difficulty in following the downward continuation of the geyser-chamber, owing to the irregular form, and the tendency of the Mexican miners to wander off into branching veins leading nowhere. So it is with some pride, which perhaps you will excuse, that I mention that the present discovery has been made under my personal direction of the work, based on the theories which observation of other parts of the mine had caused me to form. Immediately under the old large ore-chamber, where the 'run' was, the geyser-chamber ceases to descend more or less vertically, suddenly becoming nearly horizontal, running with but slight fall for some 45 metres in a north-westerly direction, and for about 35 metres without ore. Here the ere suddenly reappears, and at the same time the geyser-chamber appears to resume a more vertical course, but we have not yet advanced far enough to be sure. The ore is found at a level about 25 metres below the floor of zero level, the lowest point yet reached by us. The find, therefore, is important in showing that our ore continues in depth. A still more interesting feature is that it is rich black ore found immediately below a small patch of very low grade 'acerado,' which was first struck. This is the first case in the history of the mine in which black ore has been found underneath 'acerado,' and it is of the greatest importance, as black ore is not only richer but more easy to treat than the other. This find will at once improve our production, but I must point out that a good deal of ventilation work must be done before we

The ultimate result of the exploring work carried on by Mr. Mackenzie was the dissovery of what seemed to be the general run of ore, and an enormous "bonanza" chamber of soft, rich run of ore, and an enormous bonanza enamoer of sofe, from ore, chiefly of the black variety, containing up to 8 per cent. and over of quicksilver. This "bonanza" chamber continued to yield ore well on into 1894, and probably produced considerably over 3000 tons of ore, averaging between 4 and 5 per cent. of quicksilver.

quicksilver.

The appearance of the ore bodies is such as to leave little doubt of their having been deposited from solution by mineral springs, which have also carried large quantities of gypsum. At several points in the workings, pipe-like openings of great length and with smooth surfaces, have been found, evidently waterworn, and through which there is little doubt that at one

waterworn, and through which there is little doubt that at one time mineral springs have made their way.

The general occurrence of the ore is peculiar, large beds or layers forming chambers of black ore being met with—veritable "bonanzas"—and these are usually more or less connected by thin threads or veins. It may be said generally that there exis a main ore shoot, on which the ore chambers are irregularly placed, and which has been followed more or less directly in the search for ore. In the upper part of the mine, which is largely composed of gypsum, irregular stringers of ore run in all directions, and are most difficult to follow, while here and there in the folds of the gypsum, pockets of rich ore are to be met with.

ALUMINIUM .- From the Comptes Rendus, of December 2, it appears that M. Henri Moissan has been investigating the contra-dictory results which experiments have arrived at with reference to dictory results which experiments have arrived at with reference to some of the properties of aluminium. M. Moissan ascribes these to the fact that all commercial samples of this metal contain impurities. The effects of nitrogen and carbon he has already dealt with, and having had occasion to analyse samples of aluminium from the works at La Pras (France), Neuhausen (Switzerland), and Pittsburg (United States), he has now discovered a new impurity—namely, sodium. This may be present to the extent of 1 to 3 per cent., and renders the aluminium liable to be slowly attacked by water. The presence of a small quantity of sodium also completely alters the character of aluminium alloys.

ME, F. W. GREY, of the firm of Mesers. Charleton and Co., of Dashwood House, E.C., has left London to inspect some properties in the Mysore district of India.

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OUICKSILVER MINING IN THE DISTRICT OF GUADALCAZAR, STATE OF SAN LUIS POTOSI, MEXICO."

By HENRY F. COLLINS.

(Concluded from page 107.)

Cost of Treatment.

THE cost of furnacing ore at Guadalcazar has varied considerably, and was for a time abnormally high, owing to several causes, chief among which may be mentioned the

following:—

1. Irregular supply of ore from the mine, which was insufficient to keep two furnaces working at their full capacity; and the improper treatment of the richer ores separately instead of

mixing them with poorer ores.

2. Absence of skilled furnace labour and adoption of tools which were not well suited to the then arrangement of the furmase doors, &c.

3. Excessive consumption of fuel by the furnaces as at first

erected.

4. Use of an unnecessary admixture of lime with the cre by which its volume was largely increased, and the capacity of the furnaces proportionately diminished.

Up to February, 1894, no less than 20 per cent. of lime was being mixed with the cre in order to assist in the expulsion of the quicksilver, but the results of the author's experiments showed that 5 per cent. was ordinarily ample, and, owing to the saving in bulk thus effected, was enabled to increase the quantity of ore treated by 25 per cent. at the same cost for fuel and labour. Alterations in the furnaces themselves were followed by a further saving of 50 per cent, in the quantity of followed by a further saving of 50 per cent. in the quantity of

A plant of two of the improved furnaces, treating 12 tons per day each, requires at Guadalcazar the following staff:—

2	furnace foremen (day and n	ight), a	t \$1:	50	Mex. cur. \$3.00	
	watchman (night), at \$0.75				0.75	
16	furnacemen (8 per shift), at	\$0.75			12.00	
	firemen, at \$0.50				2.00	
	wood and burnt ore men, at				3.00	
1	man and 2 boys cleaning fla &c., at \$0.37 and \$0.12	sks, wa	shing	Loot,	0.62	
ich	on 94 tone, is about 80 con	ta nar	ton		\$21.37	

rhich, on 24 tons, is about 50 cents per ton.

Each furnace should burn about 49 cargas (say, 10 to 11 cords) per day of fairly dry mountain woods (mezquite, mountain cak, &c., costing 25 cents per carga, making a daily expense of \$20 for fuel for the two furnaces.

The cost of treatment at New Almaden during 1882 is given below for comparison with the cost at Guadalcazar:—

	Guad	inicazar.				d.		New Almaden.			d.
Fuel h	0.93 80.30	Mex. at 2s,	6d,	=	2	034	80-34	New Almaden. U.S. cur. at 4s, 2d,	=	1	834
.,					-	334		11 + 1			1%

It will be seen that the figures do not come out so badly, taking into account the small scale of the plant at Guadalcazar, its imperfections, and its great simplicity compared with the far more efficient but enormously costly Californian furnace plant, which is, moreover, on so large a scale as to allow of many additional economies in working.

Losses in Working.

The following table shows the furnace results at Guadalcazar for the first nine months of the year 1894, during which period the author was in charge of the mines; the figures for the years 1892 and 1893 are added for comparison:—

Percentage yield. Per-

Year,	Pounds ore treated,	Poune Contents.	ds of mercu Yield,	Lost.	Perc Average percent- of ore.	ge On	mer-	on the
1893 1893	5,517,468 7,554,487	103,269·76 305,900·59	72,821°01 256,238 57	30,448 75 48,662:02		1:318	70·51	0.658

These figures will be more easily compared if we reduce them

•	HOURT	warne	Averag		r week.		L	os of mercury	
	1892		Tons treated. 53.7		Flaske yielded. 18-4	 Percentage of ore treated. 1.871		per ton of ore.	
	1893		91.2	**	65·6 45·7	 4·050 2·256	* *	13·16 7·70	

(nine months).

It will be noticed that during the year 1893 the ores extracted were of much better quality than usual, but although the yield was naturally greater, the loss per ton of ore was also considerably greater. During the first nine months of 1894 the ore fell off greatly in percentage, but the quantity treated was so much larger that the weekly yield did not fall off to anything like the same extent, while owing to greater care in working the furnaces and condensors the loss was reduced to 7.7 lbs. per ton of ore treated—a figure which compares well with the losses for 1892 and 1893, respectively 11-06 lbs. and 13-16 lbs. per ton. Although, however, this loss of 7.7 lbs. per ton compares favourably with previous work at Guadalcazar, and with the average work at Almaden, in Spain, where the less on 8 to 9 per cent. of ore is over 9 lbs. per ton, it compares very badly with the results at New Almaden (California) and Idra (Austria) quoted by Christy,† as will be seen from the following table:—

Average Percentage Loss in the compares the percentage beautiful to the compares the percentage in the percentage in

Locality.	1	Average percentage		merou		Loss in lbs. per ton.
Almaden, Spain, 1878		8 to 9		51		81 to 9
Guadalcazar, Mexico, 1894		2.26		17		7.7
New Almaden, California, 1882		3.00		10		6
Ditto, 1885		1.87		12.8		4.86
Idria, Austria		1.296		8.84		2.1
We will now investigate th	0 8	ource of	the	heavy	los	s. The

Furnace loss—in burnt ores thrown away

Condenser loss—mechanical vapour and liquid losses from the condensers.

3. Chimney losses (a)—as uncondensed vapaur.

4. Chimney losses (b)—as condensed globules or mist.

At Guadalcazar, owing to the use of muffle furnaces, there is an additional, or fifth source of loss, through cracks in the muffle arches and beds allowing vapours to escape directly into the fire flues, and so to the chimney, without any chance of con-

Of the above, there is no doubt that the first is comparatively lasignificant everywhere, providing the furnacing is properly done. At Guadalcazar every charge is tested before being

* A paper read before the recent meeting of the Institution of Mining and Metallurgy.

J January—September.

J "Quicksilver Condensation at New Almaden," B. B. Christy, Trans, Amer.
881, of Atio., Alog., xiv, 1685.

drawn, and a good sample of it carefully assayed the next day. During 1894 the average assay of all the burnt ore, including cases of charges drawn too soon through carelessness of the furnace men, did not exceed 0.015 per cent. on the ore, corresponding to a loss of three-tenths of a pound per ton.

The second source of loss, though comparatively great at Almaden, in Spain, with the system of condensation in aludels there in use, is also comparatively insignificant at all works using iron condensors, Guadalcazar not excepted.

The chimney losses must always be the most important in any quicksilver plant, and Guadalcazar is no exception to the rule. Comparing 3 (vapour loss) with 4 (mist loss), Christy ably shows that, supposing the vapours to be cooled to at least 20°C. before escaping, the mist loss as found by the difference between the total chimney loss and the calculable vapour loss is always (even in shaft and shell furnaces) from two-and-a-half to three times as much as the latter. This, no doubt, holds good to an even greater extent at Guadalcazar, except that, owing to causes which will be explained below, it is probable that at times the vapours escaped at a temperature above the average one of 20°C, and in these cases, of course, the vapour loss would be abnormally high.

The fifth source of loss above mentioned as specially affecting the Guadalcazar furnaces—viz., leskage through cracks in the muffle should also be a comparatively small one, provided that the draught inwards is sufficiently strong. Unfortunately, however, at Guadalcazar, owing to the very short distance travelled by the fumes before reaching the chimney, the absence of any means of cooling other than by atmospheric radiation (and this in a climate where the shade temperature during the day averages nearly 70°); and, more than all, to the wholly insufficient surface provided for catching the fine mist of condensed globules, it was not possible to permit of a sufficiently rapid draught through the condensing system on account of the

the introduction of air into the muffle. Whenever loss of mercury was noted at these openings, showing either temporary excess of pressure inside the muffle over the outside air, or, at any rate, deficiency of draught through the condensers, the dampers connecting these with the chimney flue were somewhat opened for a time; but experiment showed that the mist losses were very largely increased whenever the dampers were opened, owing to the consequent increase of velocity of the air-currents, and to the insufficient surface provided for the collection of fine condensed globules; and the practical working of the furnace plant thus resolved itself into a question of balancing these two sources of loss by keeping the dampers as far closed as possible, short of permitting the escape of mercury fumes from the furnace doors, which, however, it was not possible to entirely prevent during the operations of charging and discharging the furnace. It was found by experiment that a speed of about 60 feet per minute for the air current in the condensers was the maximum permissible without largely increasing the mist losses.

As regards the comparison between vapour loss and mist loss, it was at first supposed that, owing to the entire absence of water cooling in the condensers, and to the fact that they were exposed during the daytime to the comparatively high sun temperature (although this disadvantage was fully compensated by the cooling dews during the night), the vapour losses were very much higher relatively to the mist losses than was the case, for numerous observations taken of the furnace gases at the end of the condenser flue leading to the chimney showed that their temperature was rarely over 25° C., even in the afternoon, and often went down to 15° in the early morning, the average temperature being little, if anything, above 20° C. Considering the condensers, the side of the side of the furnace in which the gradient of the condensers are yellowed the condensers grade the very small volume of gases passing into the

minutes with a very fine deposit, which, on rubbing between the fingers, always shows microscopic globules of mercury. The actual percentage of mercury contained in this deposit varies greatly, being highest with a feeble, and lowest with a strong draught, which, although it carries away, no doubt, a greater total amount of quicksilver, carries over very much of the fine furnace-dust, composed chiefly of lime and gypsum. When treating ore of 2 per cent. various samples of this dust have assayed from 1½ to 4 per cent., being, therefore, somewhat richer than the original ore at this point, and, no doubt, at a greater distance from the furnace, the deposit, although smaller in amount, would be richer in quicksilver.

As in the case of leadworks, where extensions of the flues, even up to a length measured by furlongs and not by feet, and improved dust-settling arrangements, have always been found to pay for themselves very quickly, there can be no doubt that the present losses at Guadalcazar might be reduced at least to one-half their present amount by suitable flues and chambers provided with some "extended surface" arrangement. Following out this idea, in September, 1894, the author erected a large settling-chamber of brick, lined with cement mortar, and painted with boiled coal tar, divided into eight compartments by transverse partitions, so as to form a tortuous flue 72 feet long by 3 feet 4½ inches wide and 14 feet high, giving a sectional area of about 47 square feet. Inside each compartment (which had an arehed brick top and was provided with three arched doorways in the front wall for easy access, which were temporarily bricked up from clean-up to clean-up) was a chequer-work formed of sticks of wood 3 feet long and from 1½ inch to 2 inches in diameter (selected from the wood brought for fuel) stacked in "Christy, lee, cit."

* Christy, ics. cif.

† The inside dimensions of the iron flue which unites the currents from the two haives of the condenser system belonging to each furnace are 24 inches by 5 inches, or (say) 3-14 square metre, the average velocity of the current in this flue (as determined by ancommeter), when the furnace is working well, being 50 feet or 13-3 per minute. This gives us a volume of 2-55 centimetres of gases per minute, or 3485 cubic metres per 24 hours. Now, the weight of a cubic metre of quicksilver vapour at 202 C., according to the figures of B. Hagen (who repeated Regnault's determinations), is 0-003/233 gram; therefore, multiplying the possible loss of quicksilver as vapour under the conditions specified is only 0-68 kilometres per day per furnace. Even if the furnace be treating only 10 metric tons per day of ore containing 2 per cent. quicksilver, the total loss from this source is only 0-425 per cent. of the quicksilver present, or 17/1000 of a pound per ton of ore treated, which is even less than the loss in the calcined ore,

such a way as to leave about 4 inches clear space between two adjacent sticks in a layer, the sticks in each layer crossing the preceding layer at right angles, the object being to give the requisite surface for the fine suspended and dust-coated globules of mercury to cling to it without increasing too much the resistance to the air current. It was intended that this settling-chamber should be cleared out every six months, or as often as the chequer work might become so choked with deposit as to interfere with the free passage of the gases; but no figures are obtainable as to results because the author left Guadalcazar two months afterwards, soon after which the production of ore fell off very rapidly to little or nothing, and the mines were shut down in January, 1895, since when they have been practically idle, the company in England having a "reconstruction" in hand.*

At the mines of the Nuevo Potosi Company, Mr. W. H.

hand.*
At the mines of the Nuevo Potosi Company, Mr. W. H. Rundall has constructed some improved furnaces of the muffle type, with which he is treating ores of \$\frac{1}{4}\$ to 1 per cent. (averaging about 0.85 per cent.) and recovering about 86 per cent. of the quicksilver contents, this result corresponding to the very satisfactory loss of only \$2\frac{1}{4}\$ lbs. of quicksilver per ton of ore treated, but the author understands that the gentleman referred to intends to describe his own work shortly in the transactions of another society, and, therefore, it need not be further discussed in this already lengthy paper.

General Considerations.

The chief drawback of the Guadalcazar district is the want of water, which renders it almost impossible to use steam machinery for underground work, &c. During the rainy months a little water can be collected in shallow pools; and the Nuevo Potosi Company has the exceptional advantage of two large pools close to its works; but springs are few, and the country is so much fissured and broken up that it is not possible to construct large reservoirs in the gullies and beds of dry watercourses. Except during the rainy season, every drop of water used in and about the La Trinidad Mines and works has to be brought many miles on mule-back, at a cost of 19 cents per load of two small barrels containing nominally 20, and really averaging from 16 to 18 gallons the load. The Guadalcazar Company has constructed two masonry cement-lined tanks, holding together a quarter of a million gallons (and it was intended to construct more of the same kind, which can be filled by surface water during heavy showers in the rainy season. The cost of these masonry-cemented tanks is, however, heavy, and the loss by evaporation in that dry atmosphere very great, so that no adequate supply for a large plant of steam machinery for underground work can be looked for from this source except at inordinate expense.

Labour in the district is tolerably plentiful, cheap, and very fairly effective The natives of the district are a peaceful and industrious set of men, and although very fond of keeping their innumerable holy days (i.e., Saints' days) and feast days, are generally amenable to reason when some work of real necessity is concerned. The foremen and artizans are, as a rule, honest and reliable, as far as their abilities go, and work for a very low General Considerations.

is concerned. The foremen and artizans are, as a rule, honest and reliable, as far as their abilities go, and work for a very low rate of wages. The author had from 500 to 600 men under him at Guadalcazar, and never came across a more orderly set, taking them as a whole, or one more reasonable to deal with if handled the right way.

* The company has since been reconstructed, and the works are again in operation,—December, 1895.

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

THE CORNISH MINE SHARE MARKET.

afr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices
Liskeard, Cornwall, writes (January 30):—The mining market has
hardened a little on the reaction of tin, with more disposition to
hold shares for an improvement. Prices are mostly nominal, with
but few transactions. Quotations:—Carn Brea, \(\frac{1}{2}\) to \(\frac{1}{2}\); Devon
Consols, 20s. to 21s. 6d.; Dolcoath (fully paid), 16s. to 16s. 6d.;
ditto (partily paid), 4s. 3d. to 4s. 6d.; East Pool. \(\frac{2}{2}\) to 3; Killifreth,
6s. to 6s. 6d.; Levant, 4 to 4\(\frac{1}{2}\); Polberro, 10s. to 11s. 6d.;
South Frances, 3s. 6d. to 10s.; Tincroft, 1\(\frac{1}{2}\) to 3; West Kitty, 2\(\frac{3}{2}\)
to 3; Wheal Basset, 3 to 3\(\frac{1}{2}\); Wheal Grenville, 7\(\frac{3}{2}\) to 8.

MANCHESTER.

MANCHESTER.

Mesers. Joseph R. and W. P. Baines, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write, January 30 (noon):—
Markets, notwithetanding the interruption of the settlement, have been buoyant this week, despite a few set-backs in profit-taking. The buoyancy was distinctly added to by the dividend announcement of the Lancashire and Yorkshire Company, and somewhat detracted from by that of the Great Northern. Still, on balance, detracted from by that of the Great Northern. Still, on balance, home rails are all better where altered, and the same remark applies to Americans, Canadians, and Mexicans, without contradiction amongst the active issues. Other departments of the markets have a similar record, as will be seen from the changes recorded below, In the face of the general rise it is not surprising that Consols are in the same category with rise of 5-16 on the week. We may leave daily details alone, for declines have been few and small, and mainly owing to exigencies of the arrangement of the account either actual or in prospect with, as we have said, an unbroken list of advances for the period, notwithstanding the small fluctuations in the meantime. There are views held in influential quarters that the present feeling of confidence is not quite justified, and we agree that it is well not to "shout before you are out of the wood." At the same time common sense, apparently, is prevailing in political matters (diplomatists notwithstanding), and we are not prepared to accept at the present a pessimistic view of the situation. Details hereunder of markets other than rails:—

Consola.—Higher: Two and Three-Quarter per Cent., 5-16.

ing), and we are not prepared to accept at the present a pessimistic view of the situation. Details hereunder of markets other than rails:—

CONSOLS.—Higher: Two and Three-Quarter per Cent., 5-16.

COLONIAL STOCKS, &C.—Higher: Canada Registered, 1; New South Wales Inscribed, 1; New Zealand Inscribed, 1.

CORPORATION STOCKS AND DEBENTURES.—Higher: Bradford Four per Cent., ½; Liverpool Three and s-Haif per Cent., ½; Liverpool Three and s-Haif per Cent., ½; Longton Three and Three-quarter per Cent., 1; Manchester Four per Cent., 1 to 1½; Manchester Three per Cent., ½

FOREIGNERS.—Higher: Argentine Six per Cent., 1½ to 2; Argentine Five per Cent., 1; Brazilian Four and a-Haif per Cent., 1; Egyptian Unified, ½; Italian Rentes, ½ to ½; Spanish Four per Cent., ½; Uruguay Three and a-Haif per Cent., ½—Lower: Tarks "D," ½.

BANKS.—Higher: Consolidated, 1-16; London and Midland, ½ to ½; Manchester and County, ½; District, ½ to ¾; Mercantile of Lancashire, ½ to ½; Parr's, ½; w. D., and Manchester and Salford, ½.

INSURANCE.—Higher: Liverpool, London, and Globe, ½; Reliance Marine, 1-16; Royal, ½.—Lower: Equitable Fire, 1s.; Maritime, ½; National Boiler, ½ to ½; Ses. ½.

COAL, IRON, &C.—Higher: Bolckow, Vaughan (fally paid), ½; John Browns, ½; Cammells, ½; Tredegar A, ½. Lower: Sheepbridge A, ½.

TELEGRAPHS AND TELEPHONES.—Higher: Anglo-American, ?;

A, \$\frac{1}{4}\$. TELEGRAPHS AND TELEPHONES.—Higher: Anglo-American, \$\frac{1}{4}\$; ditto Preference, \$1\frac{1}{4}\$ to \$2\frac{1}{4}\$; Direct United States Cable, \$\frac{1}{4}\$; Eastero, \$\frac{1}{4}\$; Eastern Extensions, \$\frac{1}{4}\$; Telegraph Construction, \$2\$.

BREWERIES.—Higher: Manchester, 1; Parker's (Burslem), 1 to 1;

BREWEBIES.—Higher: Manchester, \$\frac{1}{2}\$; Parker's (Burslem), \$\frac{1}{2}\$ to \$\frac{1}{2}\$; Threifalls, \$\frac{1}{2}\$.

MISCELLANEOUS.—Higher: Bryant and Mays, \$\frac{1}{2}\$; Cleats, \$\frac{1}{2}\$ to \$\frac{1}{2}\$; Lever Brothers, \$3-16\$; Liverpool United Tramways, \$\frac{1}{2}\$; Manchester Carriage A, \$\frac{1}{2}\$ to \$1\frac{1}{2}\$; ditto B, \$\frac{1}{2}\$; ditto C, \$\frac{1}{2}\$; Ryland's and Sons, \$\frac{1}{2}\$; Spiers and Pond, \$\frac{1}{2}\$; Gas Light \$A\$, \$2\$; Imperial Continental Gas,

t; Globe Telegraph and Truet, ‡; Ship Canal Ordinary, 1-16 to å. Lower: Karles, 2; Kastman's, ‡; United Alkali, ‡; West India as

Pacific Steam, 3.

LATER (4 P.M.).—Home rails good again to-day, with but slight exception, some showing further fair advance. Americans better again, too, on the whole, without anything special in quotations. In Canadians, Pacifics are a feature tr-day, with a rise of close up to

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIELING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroke (January 30), writes:—Doring the past week the makets have been more active, aithough still subject to political rumours, but the prospect in that respect seems really getting more peaceful. The respect seems really getting more peaceful. The respect to the prospect of the pr

spect in that respect seems really getting more peaceful. The itr nightly settlement was arranged at easy rates of continuation to new account February 13.

In shares of coal, iron, and steel companies prices are steady. Fifeshire Main Debentures affered. Addie Preference lower at 8 is on passing of the dividend. Cairntable Gas Coal 9 i; Calderbank Steel 10s.; Marbella, 52s.; and Steel Company of Scotland, 95s. In shares of copper concerns prices show a general improvement on the upward tendency of the market for the metal, and good dividend prospects. The Arizona Company announce a dividend of 2s, 6d, for lat year, of which 1s, 6d, is nayable on February 20. Arizona lave touched 49s, 6d., Tinto to 17 is, and Tharsis 5, In shares of gold and silver mines there has been less business coing. West Australians are attracting more attention, but there is a tendency to restrict dealings in South Africans until the outcome of recent events in the Transvaal is more settled. Chartered have only varied from 67s, 6d, to 73s. 9d., Consolidated from 10 to 9 is. Rust Rand from 5 7.16 to 5 is, and Randfontein from 50s. to 53s. Sheba are unaitered, although a rich strike is reported in this mine's lower levels. Klerksdorp have been more dealt in on statements that crushings will soon commence. East Nigel offered. Afrikander are at 25s.; African Land, 3s.; African Recovery, 31s. 6d.; Austin, 4s. to ds.; Broken Land, 3s.; African Recovery, 31s. 6d.; Big Blow, 15s.; Cassel, 14s. 6d.; Colenbrander, 17s. 6d.; Gold Coast Development, 3s. 9d.; Gold Fields of Mysore, 21s. 3d.; Gravel, 2s. to 3s.; Hampton Plains, 87s. 6d.; Hauraki, 8s. 3d.; Jubilee Consols, 2s. 6d.; La Yesca, 2s, 6d.; Li-bon. 6s.; Lindsay's, 11s.; La P. ata, 1s. 3d.; Mashonaland Agency, 38s.; Mallina, 3s. 9d.; Gold Consol d'Or, 3s.; New Crosus, 31s. 3d.; Oceana, 33s.; Orion, 57s. 6d.; Crient, 13s. 9d.; Ouro Preto, 27s. 6d.; Paddington Consols, 28s.; Palmarejn, 1s.; South London-derry, 3s. 9d.; Stanhope, 22s.; Tiger, 10s.; United Gold Fields of Manica, 7s. 9d.; West Aus

EDINBURGH.

EDINBURGH.

Mesers. Thomas Miller and Sons, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of January 30:—Business in home railways has become more active since last week's report, and prices have advanced. Caledonian Deferred Converted has risen from 54 7-16 to 56, Glasgow and South-Western from 115½ to 117½, Highland from 108½ to 109½, Great North of Scotland from 111½ to 112½, North British from 44½ to 469-16, ditto Ordinary Preference from 84½ to 85½. In meurance shares Scottish Union A have fallen from 89x, to 88x, 6d., while Globes have risen from 48½ to 49, Mercantiles from 37½ to 39½, Scottish Metropolitan Life from 40x. 6d. to 41s. Bank of Scotland has advanced from 37t to 38½, Clydesdale from 19 15 16 to 29½, Commercial from 71 to 73, National from 341 to 345. Union Bank shares have receded from 21½ to 21½. British South Africa Chartered shares have changed from 69x to 72x, Niddrie Coal from 41x, to 42x, Steel Company of Scotland from 93x to 96x. 3d., Arizona Copper from 43x to 47x, Rio Tinto from 16 to 17½. Broken Hill from 57x, 3d. to 52y, 3d. Lothian Coal Preference shares have declined from 8 to 7½, John Watson (Limited) from 12 to 11½.

MINING IN CORNWALL

AND DEVON:

NOTES ON MINING IN THE WEST.

(FROM OUR SPECIAL CORRESPONDENT.)

Though the storm in Cornish mining cannot be considered as by any means over, there are indications suggesting that its force has been well-nigh spent. People generally are beginning to take a calm survey of the whole situation, and the recent crisis has not been without some good results. It ought, for instance, to show those outside the immediate mining circle who were directly interested in Cornish mining that those at the head of the concerns have sufficient faith in them, and are sufficiently strong and united to be able to pull through the most crushing situations. Even Mr. Williams himself—so old and experienced a mining adventurer—thought that the result of his action would lead to "an awful smash," but even he had reckoned without the resource and vitality of those who were so deeply involved in the industry. It has further had the result of bringing about an amalgama in which, we believe, will be profitable, and of advantage to the district. So long as Carn Brea and Tincroft were worked as separate concerns, their success or failure appealed to two sets of adventurers, but, amalgamated, they will appeal to a very much wider area, because everyone who has even the most elementary knowledge of mining, and the simplest appreciation of the mineral deposits of the district, believes that appreciation of the mineral deposits of the district, believes that Carn Brea and Tincroft setts form one of the richest properties Can Brea and Tincrott setts form one of the richest properties to be found anywhere, and, worked with economy, they can produce tin pounds a ton cheaper than at present. It is sincerely to be hoped that sufficient capital will be forthcoming to vigorously develop the property, and there is this further advantage in regard to them that they are so well equipped with the most modern appliances that none of the new capital will be required for this appliance. At Carn Brea there is the largest air compressor in the county, which was put up by Messrs. Holman Brothers, of Camborno, a year or two ago—a magnificent piece of machinery, capable of working all the rock drills in the neighbourhood. There are very substantial promises of support to the scheme in Cornwall, and a large number of people, now that their liability will be limited, will be very willing to put a moderate amount into such a speculation. into such a speculation.

The action of Mr. Strauss, M.P., in the present crisis has tended in no slight measure to help the difficulty, and many who were on the point of relinquishing their shares in some of the mines have, since Mr. Strauss's offers, reconsidered their position and decided to hold on. Mr. Strauss's object was to allay a feeling of panic which seemed to be spreading, and this he certainly succeeded in doing, and both political friends and opponents are giving him the credit which he deserves for a prompt and plucky intervention. His desire now is to settle the East Pool and Wheal Agar matter, and if he can persuade Mr. Hattersley to leave the basis of amalgamation to (say) Mr.

Pendarve, or Mr. Reginald Glanville, Cornish people will be quite willing to abide by the decision of either of these gentlemen, and will hail with no little satisfaction the prospect of a solution. We hear that the Messrs. Bolitho have relinquished their shares in Agar, and others are on the point of doing so some arrangement is not quickly come to, so that Mr. Hatter sley and his friends will soon have the whole thing on the bands if they are not careful.

DOLCOATH meeting will take place in the course of the next month, and is being looked forward to with no little interest. The auditors are now busy with the accounts, and when they have concluded, in about another week, the balance-sheet will be issued to the shareholders. From what we hear, we do not think it will be an unsatisfactory result, for in spite of low prices and general adverse circumstances, the mine has been working at a profit, and it is even being hinted that a dividend of 3! a share, equal to 10s. on the old shares, will be declared on the price of the price working. It will be exceedingly welcome in these

On the other side of Carn Brea Hill things are going on as well as can be expected. Water seems to be the main trouble, and all the mines have considerably more of this than they could and all the mines have considerably more of this than they could wish. Grenville, at one time, suffered severely, but since the restarting of the western engine at West Frances they have been able to hold their own. The fire at the engine-house at South Frances has, of course, meant that water has accumulated there, and some of the best tin ground is under water. The new compeny will take the matter in hand at once, and some developments of the situation there may be looked for. All South Frances men are under notice to leave as a consequence of the winding-up of the old company, but the probability is that a fair number will be re-engaged by the manager of "The Basset Mine," as the new concern is now known. For the time we fancy that Captain James will concentrate his energy on the Wheal Basset part, and this will apparently well repay looking after.

Levant meeting was not altogether satisfactory, since there was a loss of £358 on the 16 weeks, but the mine is doing better than any other in Cornwall except Dolcoath. Wheal Grenville, and Wheal Basset. The total balance against the shareholders is now £449, but no call was made, the notice convening the meeting not having made provision for one. This was made the subject of some critical remarks on the part of one or two who attended the meeting, but in view of the improved prospects of the mine there would not seem to be much ground for complaint. The debit balance is not a very formidable one, and as there is every likelihood of its being entirely wiped out 16 weeks hence, and a credit balance substituted for it, it does seem unnecessary to call on the shareholders to put their hands in their pockets. Should there, contrary to expectation, be a loss on the next account, it may be necessary to think about a call then, but we think that under the circumstances Major White was justified in the policy which he adopted. in the policy which he adopted.

Considerable discussion took place at the meeting on the often debated question of a committee. There was a committee at Levant until comparatively recently, but the sole management is now in the hands of Major White, and it must be admitted that the mine seems to be none the worse for the change. It is pointed out by the supporters of the committee system that all the great mines of the county are managed by committees, and that there is no reason why Levant should be a solitary exception to the rule. So far as the question of principle is concerned there is no doubt that the concentration of power in the hands of one man is objectionable, but from the action of the Messrs. Bolitho it would apper that there are special circumstances which render the appointment of a committee at Levant undesirable at the present juncture. the present juncture.

ENGINE EXPLOSION AT DOLCOATH MINE,-A serious explosion occurred on Wednesday afternoon in the engine department of the Dolcoath Mine, Camborne. The men working on the top of a steel boiler were blown through the windows of the engine-house by the bursting of a stop cock. Two of them, William Bart and Charles Curtis, had all the skin torn from their arms and bodies. A companion named J. Dalley was also badly injured.

Mr. Joseph Gaeland, F.G.S., has been elected President of the Institution of Mining and Metallurgy, London, in succession to Mr. J. H. Collins, who retires from that office in March next.

MINES AND BANKING CORPORATION.—Mr. Frederick Catesby Holland, has joined the board of this company.

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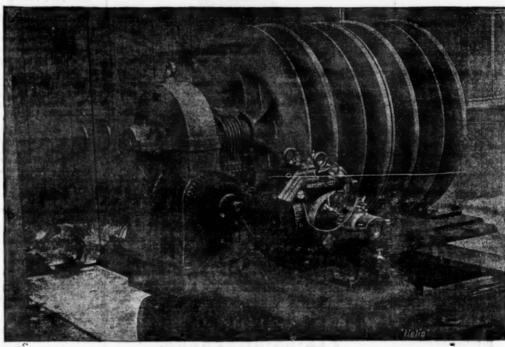
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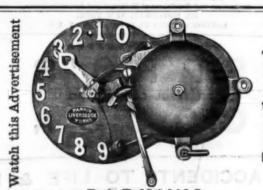
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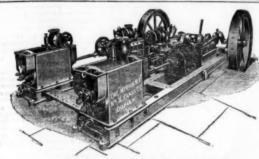
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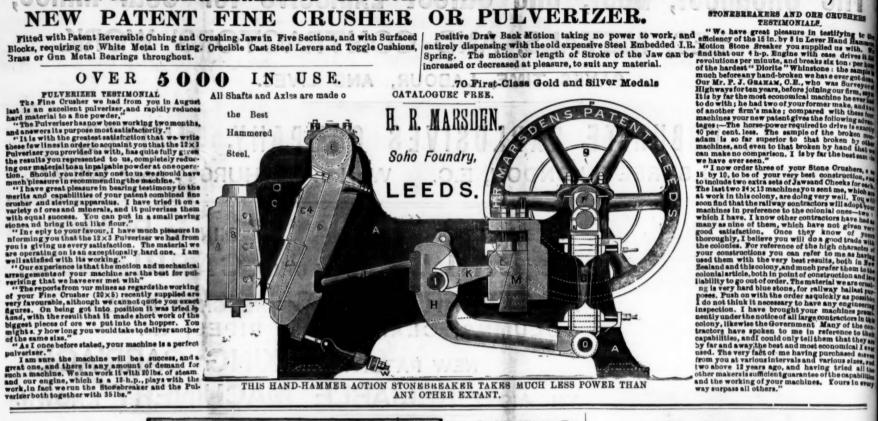
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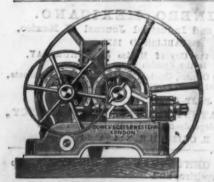
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